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(FILE 'HOME' ENTERED AT 11:09:02 ON 28 JAN 2008)

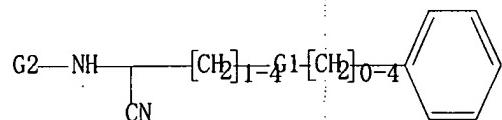
FILE 'REGISTRY' ENTERED AT 11:09:11 ON 28 JAN 2008  
L1                   STRUCTURE UPLOADED

L2               50 S L1  
L3               1293 S L1 FULL

FILE 'CAPLUS' ENTERED AT 11:09:53 ON 28 JAN 2008  
L4               82 S L3/P

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L1                   STR



G1 O, S, N

G2 H, Me, Et, n-Pr, i-Pr, n-Bu, i-Bu, CF<sub>3</sub>

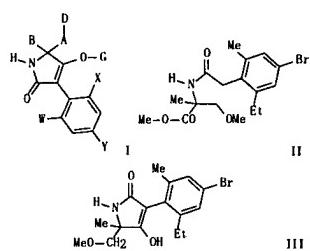
Structure attributes must be viewed using STN Express query preparation.

L3               1293 SEA FILE=REGISTRY SSS FUL L1  
L4               82 SEA FILE=CAPLUS ABB=ON PLU=ON L3/P

=> d 1-82 ibib iabs hitstr

L4 ANSWER 1 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007-1209253 CAPLUS :  
 DOCUMENT NUMBER: 147:486321  
 TITLE: Preparation of cycloalkylphenylcyclic ketoenols as herbicides  
 INVENTOR(S): Fischer, Reiner; Lehr, Stefan; Feucht, Dieter; Malsam, Olga; Hills, Martin Jeffrey; Kehne, Heinz; Rosinger, Christopher Hugh  
 PATENT ASSIGNEE(S): Bayer CropScience AG, Germany  
 SOURCE: Ger. Offen., 88pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

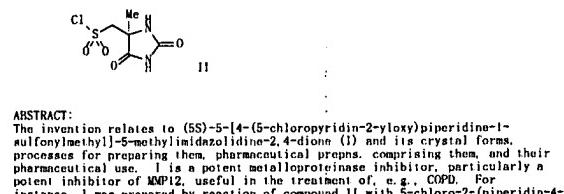
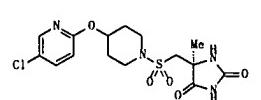
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102006018828	A1	20071025	DE 2006-102006018828	20060422
WO 2007121868	A1	20071101	WO 2007-EP2345	20070412
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, GT, HH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, NY, MZ, NA, NI, NO, NZ, OM, PG, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SU, SY, TJ, TM, TN, TR, TZ, UG, UA, ZA, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, RW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRIORITY APPLN. INFO.: DE 2006-102006018828A		20060422		
OTHER SOURCE(S): MARPAT 147:486321				
GRAPHIC IMAGE:				



## ABSTRACT:

L4 ANSWER 2 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2007-1064273 CAPLUS :  
 DOCUMENT NUMBER: 147:385987  
 TITLE: Preparation of (S,S)-5-[4-(5-chloropyridin-2-yloxy)piperidine-1-sulfonylmethyl]-5-methyl-imidazolidine-2,4-dione as a metalloproteinase inhibitor and its crystal modifications  
 INVENTOR(S): Barnwell, Neil; Briggner, Lars-Erik; Cole, Andrea; Eriksson, Anders; Perkins, Jacob; Vaz, Luis-Manuel; Wells, Andrew  
 PATENT ASSIGNEE(S): AstraZeneca AB, Swed.  
 SOURCE: PCT Int. Appl., 85pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

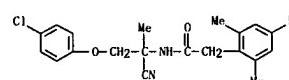
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007106022	A2	20070920	WO 2007-SE256	20070315
WO 2007106022	A3	20071101		
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, RW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
PRIORITY APPLN. INFO.: US 2006-782979P		P 20060316		
GRAPHIC IMAGE:				



ABSTRACT:  
 The invention relates to (S,S)-5-[4-(5-chloropyridin-2-yloxy)piperidine-1-sulfonylmethyl]-5-methylimidazolidine-2,4-dione (I) and its crystal forms, processes for preparing them, pharmaceutical preps. comprising them, and their pharmaceutical use. I is a potent metalloproteinase inhibitor, particularly a potent inhibitor of MMP12, useful in the treatment of, e.g., COPD. For instance, I was prepared by reaction of compound II with 5-chloro-2-(piperidin-4-

L4 ANSWER 1 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 Title compds. I [W = H, alkyl, alkenyl, etc.; X = halo, alkyl, alkenyl, etc.; Y = H, alkyl, alkenyl, etc.; A = alkylidendiy (sic); B = H, alkyl, alkoxalkyl; D = alkoxy, alkenyloxy, alkyloxy, etc.; G = H, COR1, SC2R3, etc.; R1 = alkyl, alkenyl, etc.; R3 = alkyl, alkoxy, alkylamine, etc.] were prep'd. For example, t-BuOK mediated condensation/cyclization of ket ester II afforded cyclic ketoenol III in 61% yield. In *stearic viridis* protection assays, 19-examples of compds. I after 3-wk exhibited >80% protection at 320 g/L.

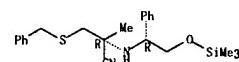
IT 736172-89-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of cycloalkylphenylcyclic ketoenols as herbicides)  
 RN 736172-89-7 CAPLUS  
 CN Benzeneacetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-2,4,6-trimethyl- (CA INDEX NAME)



L4 ANSWER 2 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 yloxy)pyridine (71%).

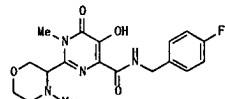
IT 950672-62-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of (S,S)-5-[4-(5-chloropyridin-2-yloxy)piperidine-1-sulfonylmethyl]-5-methylimidazolidine-2,4-dione as a metalloproteinase inhibitor)  
 RN 950672-62-5 CAPLUS  
 CN Propanenitrile, 2-methyl-3-[(phenylmethyl)thio]-2-[(IR)-1-phenyl-2-[(trimethylsilyloxy)ethyl]amino]- (2R)- (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 3 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2007-1003198 CAPLUS  
DOCUMENT NUMBER: 147:502303

**TITLE:** Discovery and Synthesis of HIV Integrase Inhibitors: Development of Potent and Orally Bioavailable N-Methyl Pyrimidones  
**AUTHOR(S):** Gardelli, Cristina; Nizi, Emanuela; Murgia, Ester; Crescenzi, Benedetta; Ferrara, Marco; Orvieto, Federica; Pace, Paola; Pescatore, Giovanna; Poma, Marco; del Rosario Rico Ferreira, Maria; Scarpelli, Rita; Homanick, Carl F.; Ikemoto, Norihiro; Alfieri, Anna; Verdrame, Maria; Bonelli, Fabio; Gonzalez Paz, Odaly; Taliani, Marina; Monteguado, Edith; Pesci, Silvia; Laufer, Ralph; Felock, Peter; Stillmock, Kara A.; Hazuda, Daria; Rowley, Michael; Summa, Vincenzo  
**CORPORATE SOURCE:** Departments of Medicinal Chemistry and Pharmacology - Istituto Di Ricerca Di Biologia Molecolare (IRBM-NRL Rome), P. Angeletti S.p.A., Pomezia, 00040, Italy  
**SOURCE:** Journal of Medicinal Chemistry (2007), 50(20), 4939-4975  
**PUBLISHER:** American Chemical Society  
**DOCUMENT TYPE:** Journal  
**LANGUAGE:** English  
**OTHER SOURCE(S):** CASREACT 147:502303  
**GRAPHIC IMAGE:**

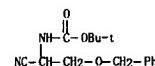


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**ABSTRACT:** The human immunodeficiency virus type-1 (HIV-1) encodes three enzymes essential for viral replication: a reverse transcriptase, a protease, and an integrase. The latter is responsible for the integration of the viral genome into the human genome and, therefore, represents an attractive target for chemotherapeutic intervention against AIDS. Benzyl-dihydroxypyrimidine-carboxamides were discovered in our labs. as a novel and metabolically stable class of agents that exhibits potent inhibition of the HIV integrase strand transfer step. Further efforts led to very potent compds. based on the structurally related N-Me pyrimidone scaffold. One of the more interesting compds. in this series is (*4*)-1, which shows a IC<sub>50</sub> of 65 nM in the cell in the presence of serum. This compound has favorable pharmacokinetic properties in three primate species and shows no liabilities in several counterscreening assays.

IT 911494-53-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(synthesis and biol. evalution of (hydroxy)(carbamoyl)pyrimidinones as potent and orally bioavailable HIV integrase inhibitors)  
RN 911494-53-6 CAPLUS  
CN Carbamic acid, {1-cyano-2-(phenylmethoxy)ethyl}-, 1,1-dimethylethyl ester

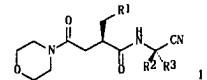
L4 ANSWER 3 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
(GCI) (CA INDEX NAME)



REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2007-1003452 CAPLUS  
DOCUMENT NUMBER: 147:52764

**TITLE:** Identification of a novel class of succinyl-nitrile-based Cathepsin S inhibitors  
**AUTHOR(S):** Bekkai, Younes; Thomson, David S.; Betageri, Raj; Emmanuel, Michel J.; Hao, Ming-Hong; Hickey, Eugene; Liu, Weina; Patel, Usha; Ward, Yancey D.; Young, Erick R. R.; Nelson, Richard; Kukulka, Alison; Brown, Maryanne L.; Crane, Kathy; White, Della; Freeman, Dorothy M.; Labadia, Mark E.; Wildeson, Jessi; Spero, Denice M.  
**CORPORATE SOURCE:** Department of Medicinal Chemistry, Boehringer Ingelheim Pharmaceuticals Inc., Ridgefield, CT, 06877-0368, USA  
**SOURCE:** Bioorganic & Medicinal Chemistry Letters (2007), 17(9), 2482-2489  
**PUBLISHER:** Elsevier Ltd.  
**DOCUMENT TYPE:** Journal  
**LANGUAGE:** English  
**OTHER SOURCE(S):** CASREACT 147:52764  
**GRAPHIC IMAGE:**

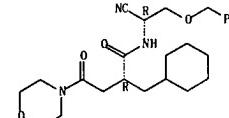


**ABSTRACT:** The synthesis and in vitro activities of a series of succinyl-nitrile-based inhibitors of Cathepsin S [R1 = cyclohexyl, 4-methylcyclohexyl, 2-indanyl, etc.; R2 = H, R3 = PhCH<sub>2</sub>CH<sub>2</sub>, PhCH<sub>2</sub>CO<sub>2</sub>H, 4-C<sub>10</sub>H<sub>8</sub>CH<sub>2</sub>CO<sub>2</sub>H; R2R3 = CH<sub>2</sub>CH<sub>2</sub>, (CH<sub>2</sub>)<sub>2</sub>N(cyclo-C<sub>6</sub>H<sub>11</sub>)CH<sub>2</sub>, (CH<sub>2</sub>)<sub>2</sub>NMe(CH<sub>2</sub>)<sub>2</sub>, etc.] are described. Several members of this class show nanomolar inhibition of the target enzyme as well as cellular potency. The inhibitors displaying the greatest potency contain N-alkyl-substituted piperidine and pyrrolidine rings spiro-fused to the  $\alpha$ -carbon of the P1 residue.

IT 324795-09-7P 939776-06-4P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); (synthesis of succinamide-based nitrile-diamides including pyrrolidine and piperidine derive, as cathepsin S inhibitors)  
RN 324795-09-7 CAPLUS  
CN 4-Morpholinobutanimide, N-[{(R)-1-cyano-2-(phenylmethoxy)ethyl]- $\alpha$ -(cyclohexylmethyl)- $\gamma$ -oxo-, (wR)- (CA INDEX NAME)

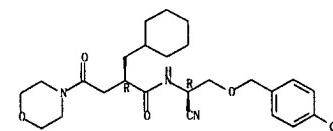
Absolute stereochemistry.

L4 ANSWER 4 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 939776-06-4 CAPLUS  
CN 4-Morpholinobutanimide, N-[{(R)-1-cyano-2-(phenylmethoxy)ethyl]- $\alpha$ -(cyclohexylmethyl)- $\gamma$ -oxo-, (wR)- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007-174094 CAPLUS

DOCUMENT NUMBER: 146:251611

TITLE: Preparation of amidonitrile compounds as parasiticides

INVENTOR(S): Ducray, Pierre; Fruchtel, Joerg; Gauvry, Noelle;

Schordereit, Weber, Sandra

Novartis AG, Switz.; Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 53pp.

CODEN: PIXXD2

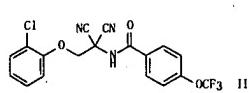
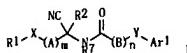
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

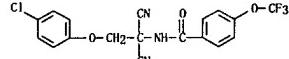
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007017088	A1	20070215	WO 2006-EP7259	20060724
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CL, CM, GA, GN, GQ, GU, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UC, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRIORITY APPLN. INFO.: MARPAT 146:251611	EP: 2005-16071	A 20050725		
OTHER SOURCE(S):				
GRAPHIC IMAGE:				

**ABSTRACT:**

Title Compds. Represented By The Formula I [Wherein R1 = H, alkyl, (un)substituted aryl, etc.; R2 = CN, CONR8R9 or CO2R8; A = CR3R4; B = CR5R6; R3-R6 = independently H, (cyclo)alkyl, alkenyl or alkyne]; Ar1 = (un)substituted (hetero)aryl; and their enantiomers or salts thereof] were prepared as parasiticides. For example, amidation of aminonitrile p-toluenesulfonate with 4-trifluoromethoxybenzoyl chloride, and followed by substitution with 1-chloro-2-chloromethoxybenzene gave II. II showed more than 80% control rate at 32 mg/kg p.o. on T. colubriformis and H. contortus. It has advantageous pesticidal properties for the control of parasites in and on warm-blooded animals.

L4 ANSWER 5 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

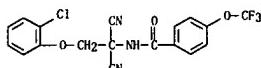


REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

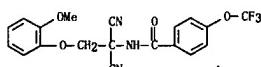
L4 ANSWER 5 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

IT 925680-14-P, N-[2-(2-Chlorophenoxy)-1,1-dicyanoethyl]-4-(trifluoromethoxy)benzamide 925680-15-SP, N-[1,1-Dicyano-2-(2-methoxyphenoxy)ethyl]-4-(trifluoromethoxybenzamide 925680-16-6P, N-[1,1-Dicyano-2-(5-cyano-2-(2,4-dichlorophenoxy)phenoxy)ethyl]-4-(trifluoromethoxybenzamide 925680-17-7P, N-[2-(4-Chlorophenoxy)-1,1-dicyanoethyl]-4-(trifluoromethoxybenzamide RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of amidonitrile compds. as parasiticides)

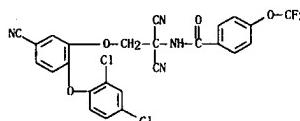
RN 925680-14-4 CAPLUS  
CN Benzamide, N-[2-(2-chlorophenoxy)-1,1-dicyanoethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



RN 925680-15-5 CAPLUS  
CN Benzamide, N-[1,1-dicyano-2-(2-methoxyphenoxy)ethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



RN 925680-16-6 CAPLUS  
CN Benzamide, N-[1,1-dicyano-2-[5-cyano-2-(2,4-dichlorophenoxy)phenoxy]ethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



RN 925680-17-7 CAPLUS  
CN Benzamide, N-[2-(4-chlorophenoxy)-1,1-dicyanoethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)

L4 ANSWER 6 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007-150949 CAPLUS

DOCUMENT NUMBER: 146:229179

TITLE: Preparation of (hetero)arylcarbonylaminoalkylcarbamoxamides as cathepsin K inhibitors.

INVENTOR(S): Bamberg, Jon Timothy; Gabriel, Tobias

PATENT ASSIGNEE(S): F. Hoffmann-La Roche AG, Switz.

SOURCE: PCT Int. Appl., 58pp.

CODEN: PIIXD2

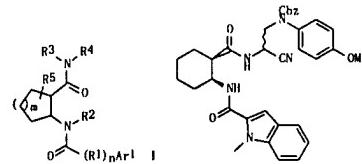
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007014839	A2	20070208	WO 2006-EP64306	20060717
WO 2007014839	A3	20070426		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KW, KN, KP, KR, KZ, LA, LC, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CL, CM, GA, GN, GQ, GU, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UC, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA, RU, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
US 2007032484-A1	I	20070208	US 2006-493208	20060725
PRIORITY APPLN. INFO.: MARPAT 146:229179			US 2005-702937P	P 20050727
OTHER SOURCE(S):				
GRAPHIC IMAGE:				

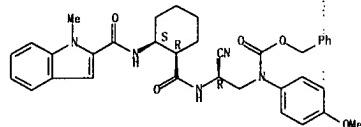


ABSTRACT:  
Title compds. [I; n = 1-3; n = 0, 1; Ar1 = (bi)aryl, heteroaryl; R1 = alkylene; R2, R3, R5 = H, alkyl; R4 = aralkyl, cycloalkyl, heterocyclyl, heteroaralkyl, etc.], were prepared for treatment of osteoporosis, tumor metastasis, unstable angina, and plaque rupture (no data). Thus, title compound (I) was prepared in 81% yield as a separable mixture of isomers via coupling of the corresponding acid and amine in DMF using EDCI hydrochloride, HOBT, and N-methylmorpholine.

IT 924298-88-4P, 924298-89-5P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

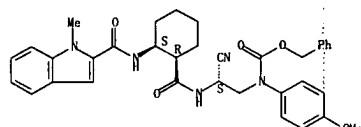
L4 ANSWER 6 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 (Prep. of (hetero)arylcarbonylaminoacyloalkylcarboxamides as cathepsin K inhibitors)  
 RN 924298-88-4 CAPLUS  
 CN Carbamic acid, N-[{2S}-2-cyano-2-[[[(1R,2S)-2-[(1-methyl-1H-indol-2-yl)carbonyl]amino]cyclohexyl]carbonyl]amino]ethyl]-N-(4-methoxyphenyl)-phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

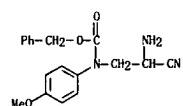


RN 924298-89-5 CAPLUS  
 CN Carbamic acid, N-[{2S}-2-cyano-2-[[[(1R,2S)-2-[(1-methyl-1H-indol-2-yl)carbonyl]amino]cyclohexyl]carbonyl]amino]ethyl]-N-(4-methoxyphenyl)-phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.



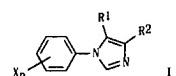
IT 924299-03-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of (hetero)arylcarbonylaminoacyloalkylcarboxamides as cathepsin K inhibitors)  
 RN 924299-03-6 CAPLUS  
 CN Carbamic acid, N-(2-amino-2-cyanoethyl)-N-(4-methoxyphenyl)-phenylmethyl ester (CA INDEX NAME)



L4 ANSWER 7 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006-912437 CAPLUS  
 DOCUMENT NUMBER: 145:314991  
 TITLE: Preparation of 1-phenylimidazole derivatives as herbicides  
 INVENTOR(S): Uchida, Atsushi; Yokota, Wakako; Hirai, Kenji;  
 Okamura, Mitsuyasu; Kondo, Satoru  
 PATENT ASSIGNEE(S): Sagami Chemical Research Center, Japan; Tosoh Corp.;  
 Hokko Chemical Industry Co., Ltd.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 65pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006232824	A	20060907	JP 2006-18326	20060127
PRIORITY APPLN. INFO.:		JP 2005-19042	JP 2005-19042	A 20050127
OTHER SOURCE(S):	MARPAT	145:314991		
GRAPHIC IMAGE:				

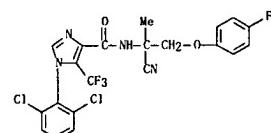


**ABSTRACT:**  
 The title compds., i.e. 1-phenylimidazole-4-carboxylic acid, 1-phenylimidazole-4-carboxamide, and 1-phenylimidazole-4-carbonitrile [I]: R1 = Cl-6-fluorophenyl; R2 = (un)substituted CONH, CO2H, cyano; X = H, halo, Cl-6-alkyl, Cl-6-alkoxyl, Cl-6-alkoxy, Cl-6-haloalkoxy, phenoxy, Cl-6-alkylthio, Cl-6-haloalkylthio, Cl-6-alkylsulfonyl, Cl-6-haloalkylsulfonyl, Cl-6-alkylsulfonyl, Cl-6-haloalkylsulfonyl, NH2, mono- or di(Cl-6-alkyl)amino, Cl-6-acylamino, Cl-6-alkylsulfonylaminio, HO, SH, CO2H, cyano, NO2; n = an integer of 1-5; provided that when n is 2-5, X is same or different) are prepared. These compds. possess very potent controlling effect against harmful weeds in agricultural, horticultural, or nonagricultural fields. Thus, a solution of 1.0 g 1-(2,6-Dichlorophenyl)-6-(trifluoromethyl)imidazole-4-carboxylic acid Et ester in 10 mL methanol was treated with 1.0 mL 40% aqueous NaOH solution and stirred at room temperature for 15 h to give 72.6% 1-(2,6-Dichlorophenyl)-5-(trifluoromethyl)imidazole-4-carboxamide ([I]). [I] at 1.2 kg/ha (preemergence) controlled 98% Echinochloa crus-galli, 80% Malachochoria vaginalis, 85% Lindernia pyxidaria, and 20% Scirpus juncoides and gave no damage to rice seedlings.

IT 908605-37-8P, N-[1-Cyano-1-methyl-2-(4-fluorophenoxy)ethyl]-1-(2,6-dichlorophenyl)-5-(trifluoromethyl)imidazole-4-carboxamide  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (herbicide which comprises imidazole derivs., manufacturing methods)  
 RN 908605-37-8 CAPLUS  
 CN 1H-imidazole-4-carboxamide, N-[1-cyano-2-(4-fluorophenoxy)-1-methylethyl]-1-(2,6-dichlorophenyl)-5-(trifluoromethyl)- (CA INDEX NAME)

L4 ANSWER 7 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L4 ANSWER 7 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 8 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:763022 CAPLUS

DOCUMENT NUMBER: 145:211036

TITLE: Preparation of N-cyanoalkyl-3-(alkylsulfonyloxy)-1H-pyrazole-4-carboxamides as insecticides and acaricides

INVENTOR(S): Kawauchi, Shinichiro; Yamada, Osamu; Tokumura, Jun;

Ono, Ryuta; Nagao, Maho; Hirai, Kenji

PATENT ASSIGNEE(S): Kaken Pharmaceutical Co., Ltd., Japan; Sagami Chemical Research Center

SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

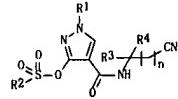
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006199637	A	20060803	JP 2005-13968	20050121
PRIORITY APPLN. INFO.:			JP 2005-13968	20050121

OTHER SOURCE(S): MARPAT 145:211036

GRAPHIC IMAGE:



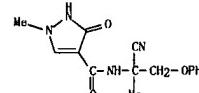
**ABSTRACT:** Insecticides or acaricides containing the title compds. [I: R1 = Cl-12 alkyl]; R2 = each (un)substituted Cl-6 alkyl or Ph; R3, R4 = H, each (un)substituted Cl-12 alkyl or C3-8 cycloalkyl; or R3 and R4 are bonded together to form C3-8 cycloalkyl; n = 0-5; R5 = H, Cl-6 alkyl, halo] as the active ingredients are disclosed. These compds. show high activity against insects or mites resistant to existing agrochem. or horticultural insecticides or acaricides and are highly safe against beneficial organisms. Hence. Thus, 3-ethoxycarbonyloxy-1-methylpyrazol-4-ylcarbonyl Et carbonate was stirred with 2-amino-2-ethylbutyranitrile in MeCN at 0° for 30 min to give crude N-(1-cyano-1-ethylpropyl)-3-hydroxy-1-methylpyrazole-4-carboxamide which was stirred with methanesulfonyl chloride and K2CO3 in MeCN at 60° for 12 h to give 37.8% N-(1-cyano-1-methyl-3-methylsulfonyloxy)pyrazole-4-carboxamide, N-(1-cyano-1-methylbutyl)-1-methyl-3-methylsulfonyloxy)pyrazole-4-carboxamide at 125 ppm controlled larva of Nephrotix cincticeps on rice seedlings by 100%.

IT 904692-88-2P, N-[1-Cyano-1-methyl-2-(phenoxy)ethyl]-3-hydroxy-1-methylpyrazole-4-carboxamide 904692-89-3P, N-[1-Cyano-1-methyl-2-(4-fluorophenoxy)ethyl]-3-hydroxy-1-methylpyrazole-4-carboxamide  
904692-90-6P, N-[1-Cyano-1-methyl-2-(4-(trifluoromethyl)phenyl)oxyethyl]-3-hydroxy-1-methylpyrazole-4-carboxamide  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation): RACT (Reactant or reagent)  
(intermediate: preparation of N-cyanoalkyl-3-(alkylsulfonyloxy)-1H-pyrazole-4-carboxamides as insecticides and acaricides)

L4 ANSWER 8 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

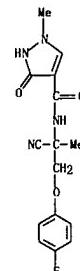
RN 904692-88-2 CAPLUS

CN 1H-Pyrazole-4-carboxamide, N-(1-cyano-1-methyl-2-phenoxyethyl)-2,3-dihydro-1-methyl-3-oxo- (CA INDEX NAME)



RN 904692-89-3 CAPLUS

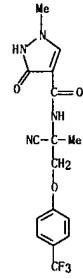
CN 1H-Pyrazole-4-carboxamide, N-[1-cyano-2-(4-fluorophenoxy)-1-methylethyl]-2,3-dihydro-1-methyl-3-oxo- (CA INDEX NAME)



RN 904692-90-6 CAPLUS

CN 1H-Pyrazole-4-carboxamide, N-[1-cyano-1-methyl-2-(4-(trifluoromethyl)phenyl)oxyethyl]-2,3-dihydro-1-methyl-3-oxo- (CA INDEX NAME)

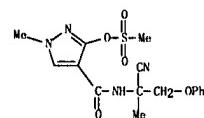
L4 ANSWER 8 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



IT 904692-92-8P, N-[1-Cyano-1-methyl-2-(phenoxy)ethyl]-1-methyl-3-(methylsulfonyloxy)pyrazole-4-carboxamide 904692-93-9P, N-[1-Cyano-1-methyl-2-(4-(trifluoromethyl)phenyl)oxyethyl]-1-methyl-3-(methylsulfonyloxy)pyrazole-4-carboxamide 904692-94-0P, N-(1-Cyano-1-methyl-2-(4-(trifluoromethyl)phenyl)oxyethyl)-1-methyl-3-(methylsulfonyloxy)pyrazole-4-carboxamide  
RL: AGR (Agricultural use); BSL (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation): USES (Uses)  
(preparation of N-cyanoalkyl-3-(alkylsulfonyloxy)-1H-pyrazole-4-carboxamides as insecticides and acaricides)

RN 904692-92-8 CAPLUS

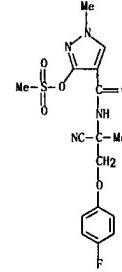
CN 1H-Pyrazole-4-carboxamide, N-(1-cyano-1-methyl-2-phenoxyethyl)-1-methyl-3-(methylsulfonyloxy)- (CA INDEX NAME)



RN 904692-93-9 CAPLUS

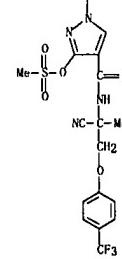
CN 1H-Pyrazole-4-carboxamide, N-[1-cyano-2-(4-fluorophenoxy)-1-methylethyl]-1-methyl-3-(methylsulfonyloxy)- (CA INDEX NAME)

L4 ANSWER 8 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



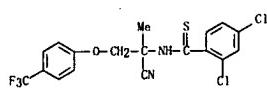
RN 904692-94-0 CAPLUS

CN 1H-Pyrazole-4-carboxamide, N-[1-cyano-2-(4-(trifluoromethyl)phenyl)oxyethyl]-1-methyl-3-(methylsulfonyloxy)- (CA INDEX NAME)





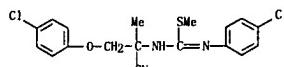
L4 ANSWER 10 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 RN 885026-13-1 CAPLUS  
 CN Benzenecarbothioamide, 2,4-dichloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



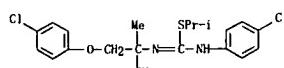
IT 885027-47-4P 885027-49-6P 885027-51-0P  
 885027-53-2P 885027-55-4P 885027-57-6P  
 885027-59-8P 885027-61-2P 885027-63-4P  
 885027-65-6P 885027-67-8P 885027-69-0P  
 885027-71-4P 885027-76-9P 885027-78-1P

RL: AGR (Agricultural use); RSI (Biological study, unclassified); SPN (Synthetic preparation); B10L (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of acetonitrile moiety-containing phenylacetamides and benzamides as pest control agents)

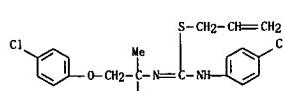
RN 885027-47-4 CAPLUS  
 CN Carbamimidothioc acid, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-N'-  
 (4-chlorophenyl)-, methyl ester (CA INDEX NAME)



RN 885027-49-6 CAPLUS  
 CN Carbamimidothioc acid, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-N'-  
 (4-chlorophenyl)-, 1-methylethyl ester (CA INDEX NAME)

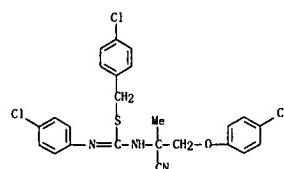


RN 885027-51-0 CAPLUS  
 CN Carbamimidothioc acid, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-N'-  
 (4-chlorophenyl)-, 2-propenyl ester (9CI) (CA INDEX NAME)

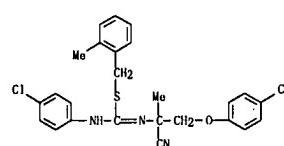


L4 ANSWER 10 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 885027-61-2 CAPLUS  
 CN Carbamimidothioc acid, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-N'-  
 (4-chlorophenyl)-, (4-chlorophenyl)methyl ester (CA INDEX NAME)



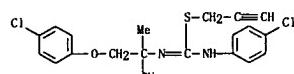
RN 885027-63-4 CAPLUS  
 CN Carbamimidothioc acid, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-N'-  
 (4-chlorophenyl)-, (2-methylphenyl)methyl ester (CA INDEX NAME)



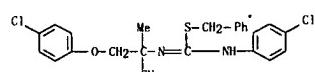
RN 885027-65-6 CAPLUS  
 CN Acetic acid, [[[[(2-(4-chlorophenoxy)-1-cyano-1-methylethyl)amino](4-chlorophenyl)imino]methyl]thio]-, methyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 10 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

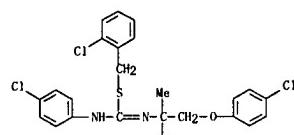
RN 885027-53-2 CAPLUS  
 CN Carbamimidothioc acid, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-N'-  
 (4-chlorophenyl)-, 2-propynyl ester (9CI) (CA INDEX NAME)



RN 885027-55-4 CAPLUS  
 CN Carbamimidothioc acid, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-N'-  
 (4-chlorophenyl)-, phenylmethyl ester (CA INDEX NAME)



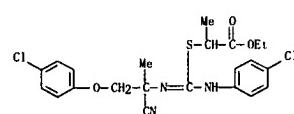
RN 885027-57-6 CAPLUS  
 CN Carbamimidothioc acid, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-N'-  
 (4-chlorophenyl)-, (2-chlorophenyl)methyl ester (CA INDEX NAME)



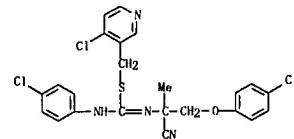
RN 885027-59-8 CAPLUS  
 CN Carbamimidothioc acid, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-N'-  
 (4-chlorophenyl)-, (3-chlorophenyl)methyl ester (CA INDEX NAME)

L4 ANSWER 10 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

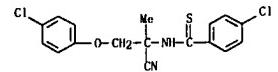
RN 885027-67-8 CAPLUS  
 CN Propionic acid, 2-[[[[(2-(4-chlorophenoxy)-1-cyano-1-methylethyl)amino](4-chlorophenyl)imino]methyl]thio]-, ethyl ester (9CI) (CA INDEX NAME)



RN 885027-69-0 CAPLUS  
 CN Carbamimidothioc acid, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-N'-  
 (4-chlorophenyl)-, (4-chloro-3-pyridinyl)methyl ester (CA INDEX NAME)

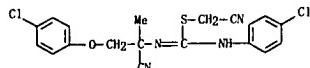


RN 885027-71-4 CAPLUS  
 CN Benzencarbothioamide, 4-chloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

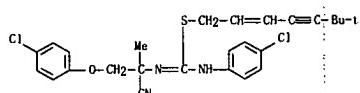


RN 885027-76-9 CAPLUS  
 CN Carbamimidothioc acid, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-N'-  
 (4-chlorophenyl)-, cyanomethyl ester (CA INDEX NAME)

L4 ANSWER 10 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 885027-78-1 CAPLUS  
CN Carbamimidothioic acid, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-N-(4-chlorophenyl)-, 6,6-dimethyl-2-hepten-4-ynyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

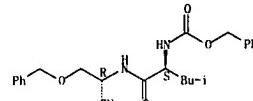
ACCESSION NUMBER: 2006:274326 CAPLUS  
DOCUMENT NUMBER: 144:468439  
TITLE: Dipeptidyl nitrile inhibitors of cathepsin K  
AUTHOR(S): Altmann, Eva; Achholz, Reiner; Betschart, Claudia;  
Buhl, Thomas; Green, Jonathan; Lettmann, Rene;  
Missbach, Martin  
CORPORATE SOURCE: Novartis Institutes for BioMedical Research, Basel,  
CH-4002 Switz.  
SOURCE: Biorganic & Medicinal Chemistry Letters (2006),  
16(9), 2549-2554  
PUBLISHER: Elsevier B.V.  
DOCUMENT TYPE: Journal Article  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 144:468439

ABSTRACT:  
A series of dipeptidyl nitriles as inhibitors of cathepsin K have been explored starting from lead structure Cbz-Leu-NH2CNC (IC50 = 39 nM). Attachment of non-natural amino acid side chains in P1 and modification of the P3 subunit led to inhibitors with higher potency and improved pharmacokinetic properties.

IT 225119-92-3 225119-40-4P 886758-73-2P  
886758-74-3P 886758-76-5P  
RL: PAC (Pharmacological activity); PTK (Pharmacokinetics); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation of dipeptide nitrile inhibitors of cathepsin K)

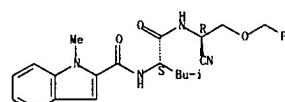
RN 225119-92-3 CAPLUS  
CN Carbamic acid, [(1S)-1-[(1R)-1-cyano-2-(phenylmethoxyethyl)amino]carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 225119-94-4 CAPLUS  
CN 1H-Indole-2-carboxamide, N-[(1S)-1-[(1R)-1-cyano-2-(phenylmethoxyethyl)amino]carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

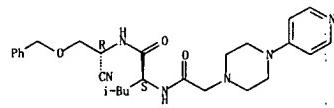
Absolute stereochemistry.



RN 886758-73-2 CAPLUS

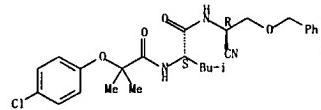
L4 ANSWER 11 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
CN 1-Piperazineacetamide, N-[(1S)-1-[(1R)-1-cyano-2-(phenylmethoxyethyl)amino]carbonyl]-3-methylbutyl]-4-(4-pyridinyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



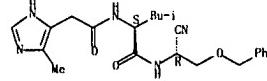
RN 886758-74-3 CAPLUS  
CN Pentanamide, 2-[(2-(4-chlorophenoxy)-2-methyl-1-oxopropyl)amino]-N-[(1R)-1-cyano-2-(phenylmethoxyethyl)]-4-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 886758-76-5 CAPLUS  
CN 1H-Imidazole-4-acetamide, N-[(1S)-1-[(1R)-1-cyano-2-(phenylmethoxyethyl)amino]carbonyl]-3-methylbutyl]-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 225119-39-1P 886758-72-1P 886758-75-4P

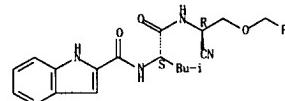
886758-77-6P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation of dipeptide nitrile inhibitors of cathepsin K)

RN 225119-39-1 CAPLUS

CN 1H-Indole-2-carboxamide, N-[(1S)-1-[(1R)-1-cyano-2-(phenylmethoxyethyl)amino]carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

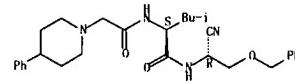
Absolute stereochemistry.

L4 ANSWER 11 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



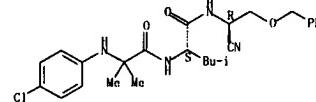
RN 886758-72-1 CAPLUS  
CN 1-Piperazineacetamide, N-[(1S)-1-[(1R)-1-cyano-2-(phenylmethoxyethyl)amino]carbonyl]-3-methylbutyl]-4-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



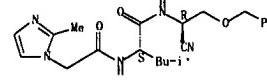
RN 886758-75-4 CAPLUS  
CN L-Lysineamide, N-(4-chlorophenyl)-2-methylalanyl-N-[(1R)-1-cyano-2-(phenylmethoxyethyl)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 886758-77-6 CAPLUS  
CN 1H-Imidazole-4-acetamide, N-[(1S)-1-[(1R)-1-cyano-2-(phenylmethoxyethyl)amino]carbonyl]-3-methylbutyl]-2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 886758-92-5P 886758-93-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

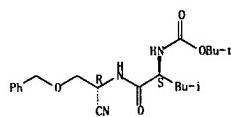
(preparation of dipeptide nitrile inhibitors of cathepsin K)

RN 886758-92-5 CAPLUS

CN Carbamic acid, [(1S)-1-[(1R)-1-cyano-2-(phenylmethoxyethyl)amino]carbonyl]-, 1,1-dimethylisopropyl ester (9CI) (CA INDEX NAME)

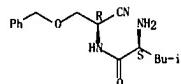
L4 ANSWER 11 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

Absolute stereochemistry.



RN 886758-93-6 CAPLUS  
 CN Pentanamide, 2-amino-N-[((R)-1-cyano-2-(phenylmethoxy)ethyl]-4-methyl-,  
 (2S)- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

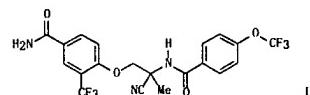
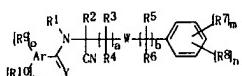
L4 ANSWER 12 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005-131229 CAPLUS

DOCUMENT NUMBER: 144-69626

TITLE: Preparation of aminooacetonitrile derivatives for controlling parasites on warm-blooded animals  
 INVENTOR(S): Gauvry, Noelle; Ducray, Pierre; Goebel, Thomas; Kaminsky, Ronald  
 PATENT ASSIGNEE(S): Novartis A.-G., Switz.: Novartis Pharma G.m.b.H.  
 SOURCE: PCT Int. Appl. 95 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 200512075	A1	20051222	WO 2005-EP6207	20050609
W: AE, AG, AL, AN, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KW, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, T2, LG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GU, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, IQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005251917	A1	20051222	AU 2005-251917	20050609
EP 1758849	A1	20070307	EP 2005-751761	20050609
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
JP 20080501761	T	20080124	JP 2007-526305	20050609
PRIORITY APPLN. INFO. :			EP 2004-13690	A 20040610
OTHER SOURCE(S): CASREACT 144-69626; MARPAT 144-69626			WO 2005-EP6207	V 20050609
GRAPHIC IMAGE:				



L4 ANSWER 12 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

ABSTRACT:

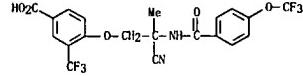
The title compds. I [Ar = (un)substituted (hetero)aryl; R1 = H, alkyl, haloalkyl, etc.; R2-R6 = H, halo, (un)substituted alkyl, etc.; or R2 and R3 are together alkylen; R7, R10 = NH2, OH, SH, etc.; R8 = halo, NO2, CN, etc.; R9 = halo, NO2, CN, etc.; a = 1-4; b = 0-4; m, n, o, p = 0-5; W = O, S, SO2, etc.; Y = O, S, NR11 (R11 = alkyl, (un)substituted Ph); with the proviso that m and p are not equal to 0 at the same time] which have advantageous pesticidal properties and are particularly suitable for controlling parasites in warm-blooded animals, were prepared and formulated. E.g., a multi-step synthesis of II, starting from 4-fluoro-3-trifluoromethylbenzonitrile, was given. Compound II reduced the number of nematode worms by more than 95% in vivo test against Trichostrongylus colubriformis and Haemonchus contortus in Mongolian gerbils by peroral administration.

IT 871795-81-2P 871795-83-4P 871795-85-6P

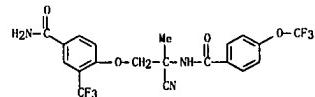
RL: AGR (Agricultural use); BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of aminooacetonitrile derivs. for controlling parasites on warm-blooded animals)

RN 871795-81-2 CAPLUS

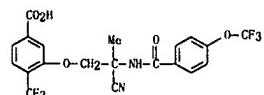
CN Benzoic acid, 4-[2-cyano-2-[(4-(trifluoromethoxy)benzoyl)amino]propoxy]-3-(trifluoromethyl)- (CA INDEX NAME)



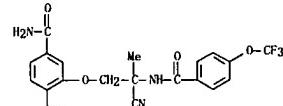
RN 871795-83-4 CAPLUS  
 CN Benzanamide, 4-[2-cyano-2-[(4-(trifluoromethoxy)benzoyl)amino]propoxy]-3-(trifluoromethyl)- (CA INDEX NAME)



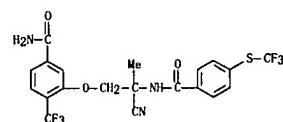
RN 871795-85-6 CAPLUS  
 CN Benzoic acid, 3-[2-cyano-2-[(4-(trifluoromethoxy)benzoyl)amino]propoxy]-4-(trifluoromethyl)- (CA INDEX NAME)



RN 871795-87-8 CAPLUS  
 CN Benzanide, 3-[2-cyano-2-[(4-(trifluoromethoxy)benzoyl)amino]propoxy]-4-

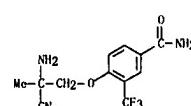
L4 ANSWER 12 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 (trifluoromethyl)- (CA INDEX NAME)

RN 871795-89-0 CAPLUS  
 CN Benzamide, 3-[2-cyano-2-[(4-[(trifluoromethyl)thio]benzoyl)amino]propoxy]-4-(trifluoromethyl)- (CA INDEX NAME)



IT 871795-97-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of aminooacetonitrile derivs. for controlling parasites on warm-blooded animals)

RN 871795-97-0 CAPLUS  
 CN Benzanide, 4-(2-amino-2-cyanopropoxy)-3-(trifluoromethyl)- (CA INDEX NAME)

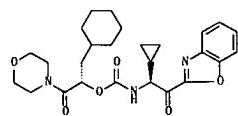


REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005-1220334 CAPLUS  
 DOCUMENT NUMBER: 143:478201  
 TITLE: Preparation of amino acid derivatives as cathepsin S inhibitors  
 INVENTOR(S): Liu, Hong; Tully, David C.; Chatterjee, Arnab; Alper, Phillip B.; Woodmansee, David H.; Mutnick, Daniel IRM LLC, Bermuda  
 PATENT ASSIGNEE(S): PCT Int. Appl., 61 pp;  
 SOURCE: CODEN: PIIXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PRIORITY INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005107464	A2	20051117	WO, 2005-US15117	20050429
WO 2005107464	A3	20060608		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KW, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, BG, ZM, ZW, AM, AZ, BY, FG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, TE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005240094	A1	20051117	AU, 2005-240094	20050429
CA 2563975	A1	20051117	CA, 2005-2563975	20050429
EP 1747476	A2	20070124	EP, 2005-74278	20050429
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 1976710	A	20070606	CN, 2005-80021967	20050429
BR 2005101503	A	20071030	BR, 2005-10503	20050429
JP 2007535568	T	20071206	JP, 2007-511076	20050429
IN 2006DN06304	A	20070831	IN, 2006-DN6304	20061026
US 2007232606	A1	20071004	US, 2006-568459	20061129
KR 2007027570	A	20070309	KR, 2006-725302	20061130
PRIORITY APPLN. INFO.:			US, 2004-566990P	P, 20040430
OTHER SOURCE(S): MARPAT 143:478201			WO, 2005-US15117	W, 20050429

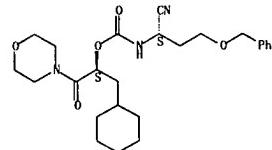
GRAPHIC IMAGE:



ABSTRACT:  
 The invention provides compds. R1R2NC02CR3R4C05 [R1] is CR6R7C0R8, CR6R7CN or

L4 ANSWER 13 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 INDEX NAME)

Absolute stereochemistry.

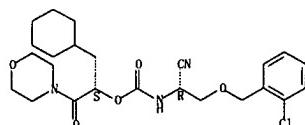


L4 ANSWER 13 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 substituted 4-oxotetrahydofuran-3-yl [R6 and R7 are independently H, (un)substituted alkyl, cyanoalkyl, cycloalkylalkyl or arylalkyl or R6R7N is heterocycloalkyl or cycloalkyl; any alkyl of R6 and R7 can have a methylene replaced with O, S, SO or SO2; R8 is H or (un)substituted arylalkyl, heteroarylalkyl, carboxy or alkyl ester or carbamido]; R2 is H or alkyl; R3, R4 are independently H, (un)substituted alkyl, cycloalkylalkyl or arylalkyl, where any alkyl of R3 and R4 can have a methylene replaced with O, S, SO or SO2; R5 is (un)substituted heterocycloalkyl or an amino group] and pharmaceutical compns. comprising these compds. for treating or preventing diseases or disorders assoc'd. with the activity of cathepsin S. Thus, amino acid deriv. I, prep'd. by a multistep sequence, has an IC50 of 6,6 nM and is at least 100 fold selective for cathepsin S over cathepsins K, B and L.

IT 869502-45-4P 869502-67-0P 869502-68-1P  
 RL: PAC (Pharmacological activity): SPN (Synthetic preparation): THU (Therapeutic use): BIOL (Biological study): PREP (Preparation): USES (Uses): (preparation of amino acid derivs. as cathepsin S inhibitors)

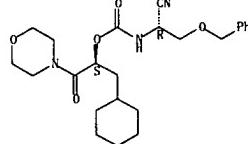
RN 869502-45-0 CAPLUS  
 CN Carbamic acid, [(1R)-2-[(2-chlorophenyl)methoxy]-1-cyanoethyl]-, (1S)-1-(cyclohexylmethyl)-2-(4-morpholinyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 869502-67-0 CAPLUS  
 CN Carbamic acid, [(1R)-1-cyano-3-(phenylmethoxy)propyl]-, (1S)-1-(cyclohexylmethyl)-2-(4-morpholinyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 869502-68-1 CAPLUS  
 CN Carbamic acid, [(1S)-1-cyano-3-(phenylmethoxy)propyl]-, (1S)-1-(cyclohexylmethyl)-2-(4-morpholinyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 14 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 INDEX NAME)

L4 ANSWER 14 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 INDEX NAME)

DOCUMENT NUMBER: 2005-811667 CAPLUS

DOCUMENT NUMBER: 143:229992

TITLE: Preparation of silyl-containing carboxamides as cysteine protease inhibitors

INVENTOR(S): Link, John O.; Graupe, Michael

PATENT ASSIGNEE(S): Axys Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 93 pp.

CODEN: PIIXD2

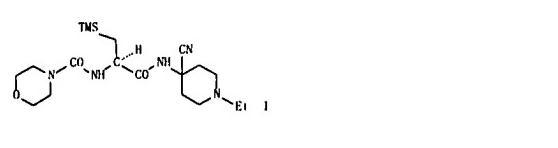
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PRIORITY INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005074904	A2	20050818	WO, 2005-US2773	20050131
WO 2005074904	A3	20050829		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SI, ST, TJ, TM, IN, TR, TT, TZ, VA, UG, US, UZ, IC, ZA, ZB, ZM, ZW, AM, AZ, BY, FG, KZ, KZ, MR, RU, TJ, TM, LT, LU, MC, NL, PL, PT, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, GA, GN, GQ, GW, ML, MR, NE, SN, TD, YU				
AU 2005210631	A1	20050818	AU, 2005-210631	20050131
CA 2554626	A1	20050818	CA, 2005-2554626	20050131
EP 1716158	A2	20061102	EP, 2005-722609	20050131
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, TD, YU				
BR 2005006494	A	20070213	BR, 2005-6494	20050131
CN 1938323	A	20070328	CN, 2005-80010399	20050131
JP 2007519744	T	20070719	JP, 2006-551515	20050131
MX 2006A09543	A	20080121	MX, 2006-P0043	20060728
IN 2006IN04357	A	20070810	IN, 2006-4367	20060728
NO 2006003842	A	20060120	NO, 2006-3842	20060629
US 2007088001	A1	20070419	US, 2006-587667	20061221
PRIORITY APPLN. INFO.:			US, 2004-540581P	P, 20040130
OTHER SOURCE(S): MARPAT 143:229992			US, 2004-547498P	P, 20040224
GRAPHIC IMAGE:			WO, 2005-US2773	W, 20050131

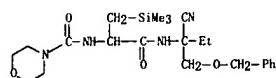


ABSTRACT:  
 The present invention is directed to silyl-containing carboxamides (R3-O-N(R2)-C(R1)(R1)-C(=O)-N(H)-E (I); variables defined below: e.g., morpholine-4-carboxylic acid [(1R)-1-(4-cyano-1-ethylpiperidin-4-yl)carbamoyl]-2-(trimethylsilyl)ethyl]amide (shown as I)) that are inhibitors of cysteine proteases, in particular, cathepsins B, K, L, F, and S and are therefore useful

L4 ANSWER 14 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 In treating diseases mediated by these proteases. The present invention is directed to pharmaceutical compns. comprising these compds. and processes for prepn. them. The present invention is also directed to the use of these inhibitors in combination with a therapy that causes a deleterious immune response in patients receiving the therapy. Although the methods of prepn. are not claimed, 11 example prepn. of I are included. For example, II was prepnd. in 2 steps starting with amide formation between (R)-2-amino-3-(trimethylsilyl)propionic acid and morpholinocarbonyl chloride using MSTFA to give 2-(R)-[(morpholin-4-yl)carbonyl]amino-3-(trimethylsilyl)propionic acid which underwent amide formation with 4-amino-4'-cyano-1-ethylpiperidine hydrochloride in the presence of HATU and iPr<sub>2</sub>Etd in DMF. For I: Q is -CO-, -SO<sub>2</sub>-, -OCO-, -NR4502-, or -CHR where R is haloalkyl and R4 is H, alkyl, hydroxalkyl, alkoxyalkyl, or aralkyl; E is -(C(R5)(R6)X1)(X1 is -C(R7)(R8)R10, -CH<sub>2</sub>CHS(O)R2R10, -C(R7)(R8)C(R7)(R8)OR10, -C(R7)(R8)CH2N(R11)SO2R10, -C(R7)(R8)C(O)N(R11)(CH2)2R10, -C(R7)(R8)C(O)NR10, or -C(R7)(R8)C(O)R11) or -(CH2)2R11) or -C(R5a)(R6a)CN. R1 is H or -R1a, R1a is 1,1-dialkylethylene-4-1-alkylene or alkylene-3-R32R33R34 where R32 is alkyl, R33 is alkyl, and R34 is alkyl, alkyl, cycloalkylalkyl, aryl, aralkyl, heteroaralkyl, or heterocycloalkylalkyl or heterocycloalkylene ring contg. the Si atom and 3 to 7 C ring atoms wherein one or two C ring atoms are optionally independently replaced with -NH-, -O-, -S-, -SO<sub>2</sub>-, -SO<sub>2</sub>-, -CO-, -CONH-, or -SO2NH-. R2 is H or alkyl; R3 is alkyl, haloalkyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocycloalkylalkyl, heterocycloalkylene-6-X6R35 [wherein X6 is -NR36-, -O-, -CO-, -COO-, -OCO-, -NR36CO-, -CONR36-, -NR36SO2-, -SO2NR36-, -NR36COO-, -OCO NR36-CONR37 or NR36SO2NR37-] (encl R36 and R37 = H, alkyl, or acyl and n4 = 0-2) and R35 is H, alkyl, haloalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heterocycloalkylalkyl, aryl, aralkyl, heteroaryl or heteroaralkyl); addnl. details are given in the claims.

IT 862693-84-3P. Morpholine-4-carboxylic acid {[[-(benzoyloxy)-1-cyanopropyl]-amino]-2-(trimethylsilyl)ethyl}amide  
 862693-87-6P. Morpholine-4-carboxylic acid {[-(2-benzoyloxy)-1-cyanopropyl]-amino}-2-(trimethylsilyl)ethyl}amide  
 RU: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses); (drug candidate; preparation of silyl-containing carboxamides as cysteine protease inhibitors)

RN 862693-84-3 CAPLUS  
 CN 4-Morpholinocarboxamide, N-[2-[[1-cyano-1-[(phenylmethoxy)methyl]propyl]amino]-2-oxo-1-[(trimethylsilyl)methyl]ethyl]- (CA INDEX NAME)



RN 862693-87-6 CAPLUS  
 CN 4-Morpholinocarboxamide, N-[2-[[1-cyano-1-[(phenylmethoxy)methyl]propyl]amino]-2-oxo-1-[(trimethylsilyl)methyl]ethyl]- (CA INDEX NAME)

L4 ANSWER 15 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005-564630 CAPLUS  
 DOCUMENT NUMBER: 143-97169  
 TITLE: A preparation of N-(phenoxyethyl)benzamide derivs. useful as insecticides  
 INVENTOR(S): Goebel, Thomas; Gauvry, Noelle; Drucry, Pierre  
 PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.  
 SOURCE: PCT Int. Appl. 47 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005058802	A1	20050630	WO 2004-EP14046	20041209
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, CZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TZ, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VC, VI, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, NA, SD, SL, SZ, TZ, UG, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MB, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004295229	A1	20050630	AU 2004-299229	20041209
CA 2547542	A1	20050630	CA 2004-2547542	20041209
EP 1706530	A1	20061004	EP 2004-803700	20041209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
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BR 2004017548	A	20070321	BR 2004-17548	20041209
JP 2007513911	T	20070531	JP 2006-543481	20041209
MX 2006PA06625	A	20060731	MX 2006-PA6625	20060609
US 2007037881	A1	20070215	US 2006-581463	20060717
PRIORITY APPLN. INFO.:			EP 2003-28342	20031210
WO 2004-EP14046	A		WO 2004-EP14046	20041209

OTHER SOURCE(S): CASREACT 143:97169; MARPAT 143:97169

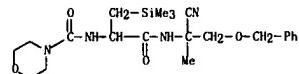
GRAPHIC IMAGE:

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

ABSTRACT:  
 The invention relates to a preparation of N-(phenoxyethyl)benzamide derivs. of formula I [wherein: R is halogen, alkyl, haloalkyl, or alkoxyalkyl, etc.; X is a single bond, O, S(O), or SO<sub>2</sub>; R1 is (CH<sub>2</sub>)<sub>1-4</sub>; R2 is (X1)<sub>1-5</sub>; X1 is CN, halogen, (halo)alkyl, or alkythio, etc.], useful as insecticides. For instance, N-(phenoxyethyl)benzamide derivative II was prepared via amination of 4-trifluoromethoxybenzyl chloride with amine III. In vivo tests on trichostomangus colubriformis and haemochirus contortus on mongolian gerbils showed that preferred invention compds. sharply reduced nematode infestation (for instance, compound II completely eliminated nematode infestation at a dose of 16 mg/kg).

IT 856675-47-3P 856675-48-4P 856675-49-5P  
 856675-50-0P 856675-51-0P 856675-52-0P  
 856675-53-1P 856675-54-2P 856675-55-3P  
 856675-56-4P 856675-57-5P 856675-58-6P  
 856675-59-7P 856675-60-0P 856675-61-1P

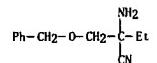
L4 ANSWER 14 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



IT 862693-85-4P, 2-Amino-2-[(benzyloxy)methyl]butyronitrile  
 862693-88-1P, 2-Amino-3-benzyloxy-2-methylpropiophenone  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); (preparation of silyl-containing carboxamides as cysteine protease inhibitors)

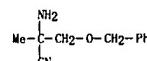
RN 862693-85-4 CAPLUS

CN Butanenitrile, 2-amino-2-[(phenylmethoxy)methyl]- (CA INDEX NAME)



RN 862693-88-7 CAPLUS

CN Propanenitrile, 2-amino-2-methyl-3-(phenylmethoxy)- (CA INDEX NAME)



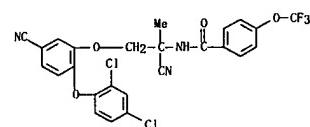
L4 ANSWER 15 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

AGRICULTURAL USE: 856675-62-2P 856675-63-3P 856675-64-4P  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

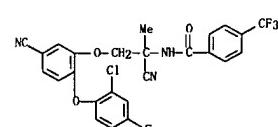
(prepn. of N-(phenoxyethyl)benzamide derivs. useful as insecticides)

RN 856675-47-3 CAPLUS

CN Benzamide, N-[(ciano-2-[5-cyano-2-(4-dichlorophenoxy)phenoxy]-1-methylethyl)-4-(trifluoromethoxy)- (CA INDEX NAME)

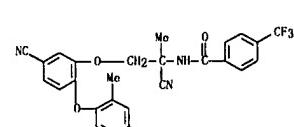


RN 856675-48-4 CAPLUS  
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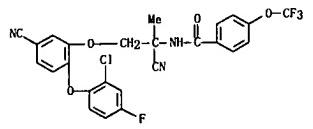
RN 856675-49-5 CAPLUS

CN Benzamide, N-[(ciano-2-[5-cyano-2-(4-(trifluoromethyl)phenoxy)-1-methylethyl)-4-(trifluoromethyl)- (CA INDEX NAME)

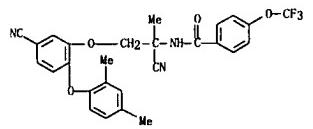


RN 856675-50-8 CAPLUS  
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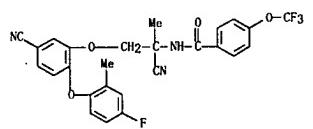
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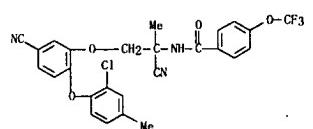
RN 856675-51-9 CAPLUS  
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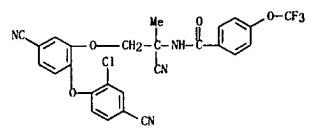
RN 856675-52-0 CAPLUS  
CN Benzamide, N-[1-cyano-2-[5-cyano-2-(4-fluoro-2-methylphenoxy)phenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



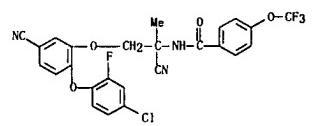
RN 856675-53-1 CAPLUS  
CN Benzamide, N-[1-cyano-2-[5-cyano-2-(2-chloro-4-methylphenoxy)-5-cyanophenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



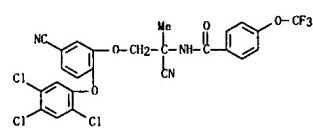
## L4 ANSWER 15 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



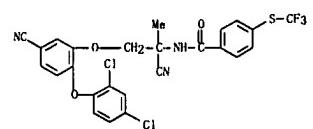
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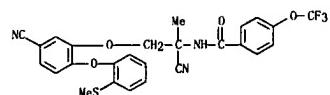
RN 856675-59-7 CAPLUS  
CN Benzamide, N-[1-cyano-2-[5-cyano-2-(2,4,5-trichlorophenoxy)phenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



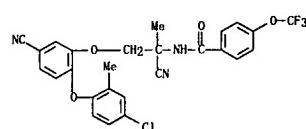
RN 856675-60-0 CAPLUS  
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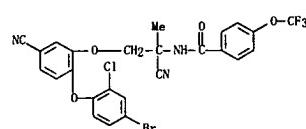
RN 856675-61-1 CAPLUS  
CN Benzamide, N-[1-cyano-2-[5-cyano-2-(4-fluoro-2-methylphenoxy)phenoxy]-1-methylethyl]-4-[{(trifluoromethyl)thio}- (CA INDEX NAME)

L4 ANSWER 15 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
RN 856675-54-2 CAPLUS  
CN Benzamide, N-[1-cyano-2-[5-cyano-2-(2-methylthio)phenoxy]phenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)

RN 856675-55-3 CAPLUS  
CN Benzamide, N-[1-cyano-2-[5-cyano-2-(4-chloro-2-methylphenoxy)-5-cyanophenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)

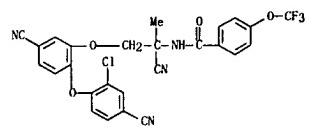


RN 856675-56-4 CAPLUS  
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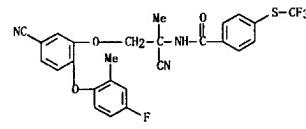


RN 856675-57-5 CAPLUS  
CN Benzamide, N-[1-cyano-2-[5-cyano-2-(2-chloro-4-cyanophenoxy)-5-cyanophenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)

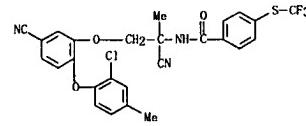
## L4 ANSWER 15 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



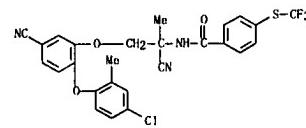
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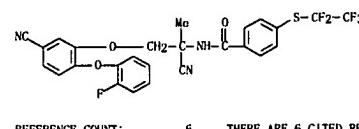
RN 856675-62-2 CAPLUS  
CN Benzamide, N-[1-cyano-2-[5-cyano-2-(2-chloro-4-methylphenoxy)-5-cyanophenoxy]-1-methylethyl]-4-[{(trifluoromethyl)thio}- (CA INDEX NAME)



RN 856675-63-3 CAPLUS  
CN Benzamide, N-[1-cyano-2-[5-cyano-2-(2-chloro-4-methylphenoxy)-5-cyanophenoxy]-1-methylethyl]-4-[{(trifluoromethyl)thio}- (CA INDEX NAME)



RN 856675-64-4 CAPLUS  
CN Benzamide, N-[1-cyano-2-[5-cyano-2-(2-fluorophenoxy)phenoxy]-1-methylethyl]-4-[{(pentafluoroethyl)thio}- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2005:508894 CAPLUS

DOCUMENT NUMBER: 143:325839

TITLE: Reactions of enantiopure  $\beta$ -ketimino sulfoxides with Et2AlCN. Scope and limitations in asymmetric synthesis of  $\alpha$ -aminonitriles

AUTHOR(S): Ruano, Jose L.; Garcia, Garcia, Maria Cifuentes; Navarro, Angel L.; Tato, Francisco; Castro, Ana M. Martin

CORPORATE SOURCE: Departamento de química Orgánica, Universidad Autónoma de Madrid, Cantoblanco, Madrid, 28049, Spain

SOURCE: ARKIVOC (Gainesville, FL, United States) (2005), (6), 33-45

CODEN: AGRVAR

URL: [http://www.arkivoc-usa.org/ark/journal/2005/I06\\_Jun/rtci/1381/EJ-1381.pdf](http://www.arkivoc-usa.org/ark/journal/2005/I06_Jun/rtci/1381/EJ-1381.pdf)

PUBLISHER: Arkiv USA Inc.

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

OTHER SOURCE(S): CASREACT 143:325839

#### ABSTRACT:

Results obtained in the reactions of Et2AlCN with exocyclic, endocyclic, and acyclic  $\alpha$ - $p$ -tolylsulfinyl ketimines are reported. Good conversions and satisfactory stereochemical results are obtained exclusively from cyclic ketamines. Isine-enamine equilibrium accounts for the incomplete conversions and low reactivities observed for acyclic amines. Configurational assignments and mechanistic proposals are based on the conformational anal. of substrates and products.

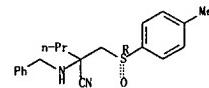
IT 865363-84-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(major) (2R)-pentanenitrile; reactions of enantiopure  $\beta$ -ketimino sulfoxides with Et2AlCN, scope and limitations in asym. synthesis of  $\alpha$ -aminonitriles

RN 865363-84-4 CAPLUS

CN Pentanenitrile, 2-[(R)-(4-methylphenyl)sulfinyl]methyl]-2-[(phenylmethyl)amino]- (CA INDEX NAME)

Absolute stereochemistry.



IT 865363-85-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(major) (2R)-propanenitrile; reactions of enantiopure  $\beta$ -ketimino sulfoxides with Et2AlCN, scope and limitations in asym. synthesis of  $\alpha$ -aminonitriles

RN 865363-85-5 CAPLUS

CN Benzeneacetonitrile,  $\alpha$ -[(R)-(4-methylphenyl)sulfinyl)methyl]-

$\alpha$ -[(phenylmethyl)amino]- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 17 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:429386 CAPLUS

DOCUMENT NUMBER: 142:481750

TITLE: A preparation of acetonitrile derivatives, useful as pesticides

INVENTOR(S): Gauvry, Noelle; Goebel, Thomas; Ducray, Pierre; Pautrizel, Francois; Kaisinskiy, Ronald; Jung, Martin; Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NM. COUNT: 1

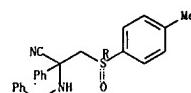
PATENT INFORMATION:

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WO 2005044784	A1	20050519	WO 2004-EP12559	20041105
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AU 2004287611	A1	20050519	AU 2004-287611	20041105
CA 2547471	A1	20050519	CA 2004-254474	20041105
EP 1682493	A1	20060726	EP 2004-797665	20041105
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, NC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
BR 2004016294	A	20070123	BR 2004-16294	20041105
CN 1902162	A	20070124	CN 2004-80039913	20041105
JP 2007510632	T	20070426	JP 2006-537263	20041105
MX 2006PA05036	A	20060706	MX 2006-PA5036	20060504
KR 793462	B1	20080114	KR 2006-708717	20060504
IN 2006CN01565	A	20070706	IN 2006-CN1565	20060505
US 2007072944	A1	20070329	US 2006-577369	20060626
PRIORITY APPLN. INFO.:			EP 2003-25290	A 20031106
			GB 2004-2677	A 20040206
			WO 2004-EP12559	W 20041105

OTHER SOURCE(S): MARPAT 142:481750  
GRAPHIC IMAGE:

L4 ANSWER 16 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

(Continued)



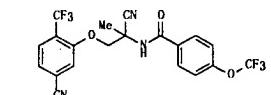
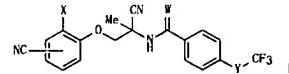
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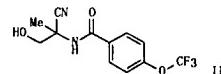
THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

(Continued)



II



III

#### ABSTRACT:

The invention relates to a preparation of acetonitrile derivs. of formula I [wherein X is Cl, Br, or CF<sub>3</sub>; Y is a single bond, O, S, S(0), or SO<sub>2</sub>; W is O or S], useful as pesticides. The active ingredients have advantageous pesticidal properties. They are especially suitable for controlling parasites in and on warm-blooded animals. For instance, acetonitrile derivative II was prepared via etherification of alc. III by 3-fluoro-4-(trifluoromethylbenzonitrile). The efficacy was calculated as the % reduction of the number of worms in each gerbil, compared with the geometric average of number of worms from 6 infected and untreated gerbils (mongolian gerbils, 3.2 mg/kg; H. contortus: 100%, T. colubriformis: 100%).

IT 851976-34-5P 851976-35-7P

851976-36-8P 851976-37-8P 851976-38-9P

851976-39-1P 851976-40-4P 851976-41-5P 851976-42-6P

851976-43-7P 851976-44-8P 851976-45-9P

851976-52-8P 851976-54-0P 851976-56-2P

851976-58-4P 851976-60-8P 851976-62-0P

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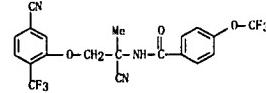
851976-74-4P 851976-76-6P 851976-77-7P

851976-78-8P 851976-80-2P

RL: AG (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

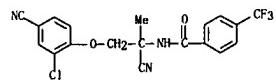
RN 851976-33-5 CAPLUS

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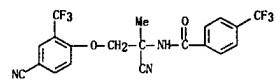


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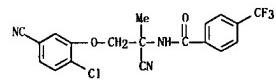
RN 851976-34-6 CAPLUS  
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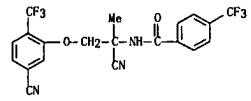
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RN 851976-36-8 CAPLUS  
CN Benzamide, N-[2-(2-chloro-5-cyanophenoxy)-1-cyano-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



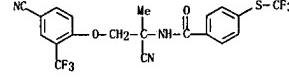
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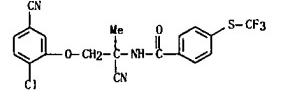
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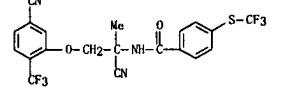
## L4 ANSWER 17 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



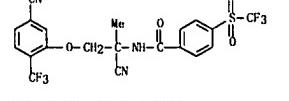
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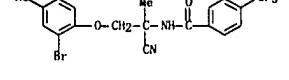
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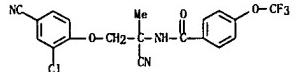
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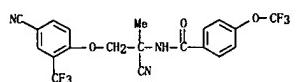
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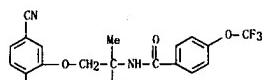
## L4 ANSWER 17 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



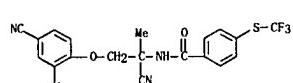
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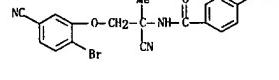
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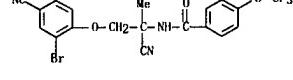
RN 851976-44-8 CAPLUS  
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## L4 ANSWER 17 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

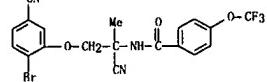
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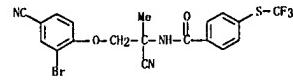
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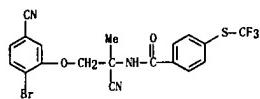


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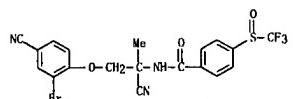


RN 851976-64-2 CAPLUS  
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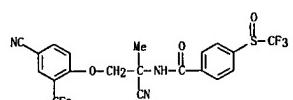
## L4 ANSWER 17 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



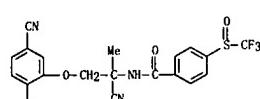
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RN 851976-68-6 CAPLUS  
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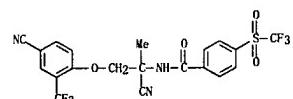


RN 851976-69-7 CAPLUS  
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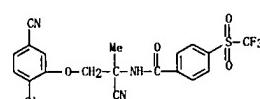


RN 851976-70-0 CAPLUS  
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## L4 ANSWER 17 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



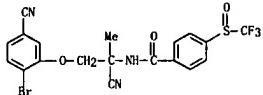
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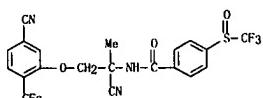
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REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

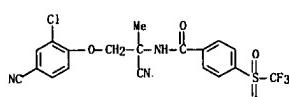
## L4 ANSWER 17 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



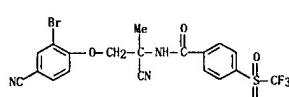
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RN 851976-74-4 CAPLUS  
CN Benzamide, N-[2-(2-chloro-4-cyanophenoxy)-1-cyano-1-methylethyl]-4-[(trifluoromethyl)sulfonyl]- (CA INDEX NAME)



RN 851976-76-6 CAPLUS  
CN Benzamide, N-[2-(2-bromo-4-cyanophenoxy)-1-cyano-1-methylethyl]-4-[(trifluoromethyl)sulfonyl]- (CA INDEX NAME)



RN 851976-77-7 CAPLUS  
CN Benzamide, N-[1-cyano-2-(4-cyano-2-(trifluoromethyl)phenoxy)-1-methylethyl]-4-[(trifluoromethyl)sulfonyl]- (CA INDEX NAME)

## L4 ANSWER 18 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005-2233 CAPLUS  
DOCUMENT NUMBER: 142-93825

TITLE: Process for preparing 2,4,5-trisubstituted imidazoles from N-acylated  $\alpha$ -aminonitriles via 2,4-disubstituted-5-haloimidazole intermediates

INVENTOR(S): Askin, David; Lee, Jaemoon; Zhong, Yong-li

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO

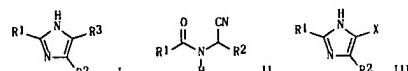
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004267026	A1	20041230	US 2004-860916	20040604
PRIORITY APPLN. INFO.:			US 2003-476389P	P 20030606
OTHER SOURCE(S):			CASREACT 142:93825; MARPAT 142:93825	

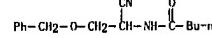


## ABSTRACT:

The invention provides a process for preparing title compds. I from N-acylated  $\alpha$ -aminonitriles II via intermediates III under mild conditions, wherein R1 = H, alkyl, -CH2-aryl or aryl; R2 = H, alkyl, -CH2-aryl or aryl; X = Cl or Br. Compds. I are very useful for the preparation of corresponding imidazole-containing pharmaceutical compds. such as losartan, and related angiotensin II antagonists. II is treated with a phosphine and a chiral tetrahalide in a solvent at 25-55° C to form a 2,4-disubstituted-5-haloimidazole III. Phenyliodine-bis(trifluoroethoxy) coupling of this intermediate with R3OH2 leads to I. For example, reaction of PhnCH2Cl with NaCN and NaCl followed by condensation with valeric acid gave aminonaphtalene nitrile II (R1 = n-Bu, R2 = CH2OBn) in overall 70% yield. This compound underwent cyclization with carbon tetrachloride in the presence of PPh3 at 45° C in CH3CN for 4 h to give III (R1 = n-Bu, R2 = CH2OBn, X = Cl) in 81% yield. Next debenzylation with methanesulfonic acid in chloroform at rt for 1 h yielded the corresponding alc. III (R1 = n-Bu, R2 = CH2OBn, X = Cl) in 90% yield. This product is a precursor to losartan.

IT 679412-75-0P  
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or agent); (preparation trisubstituted imidazoles from acylated- $\alpha$ -aminonitriles via cyclization of tetrahalocarbons in presence of PPh3 to disubstituted haloimidazoles followed by Pd-catalyzed coupling with boronic acids)

RN 679412-75-0 CAPLUS  
CN Pentanamide, N-[1-cyano-2-(phenylmethoxy)ethyl]- (CA INDEX NAME)



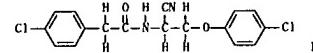
L4 ANSWER 18 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:650899 CAPLUS  
 DOCUMENT NUMBER: 141:173978  
 TITLE: Preparation of aminoacetonitrile derivatives as agricultural and horticultural insecticides  
 INVENTOR(S): Andoh, Nobuharu; Sanpei, Osamu; Sakata, Kazuyuki  
 PATENT ASSIGNEE(S): Nihon Nohyaku Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 48 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NDW. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1445251	A1	20040811	EP 2004-10346	19990428
EP 1445251	B1	20061227		
R: CH, DE, FR, GB, IT, LI				
EP 953565	A2	19991103	EP 1999-107461	19990428
EP 953565	A3	20021204		
EP 953565	B1	20040908		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			JP 1998-137806 A 19980501	
			EP 1999-107461 A3 19990428	

OTHER SOURCE(S): MARPAT 141:173978

GRAPHIC IMAGE:



## ABSTRACT:

The title compds. Ar1(Q)dC(O)NR3C(CN)R4(aW(CR7R8)bAr2 [I]; Ar1, Ar2 = (substituted) Ph, (substituted) phenyloxy, (substituted) phenylacetylene; (substituted) pyridyl and (substituted) naphthyl; Q = CR1R2 (wherein R1, R2 = H, halo, (halo)alkyl, etc.); R3 = H, (halo)alkyl, etc.; R4-R8 = H, halo, (halo)alkyl, etc.; W = O, S, SO2 or NR9 (wherein R9 = H, (halo)alkyl, etc.); b = 0-4; d = 0-1), useful as insecticides, were prepared. E.g., a multi-step synthesis of II (starting from 4-chlorophenoxy and formaldehyde dimethylacetal), was given. The compds. I were tested against diamondback moth and against smaller tea tortrix (data were given for representative compds. D).

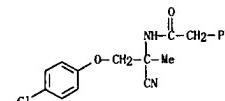
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L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

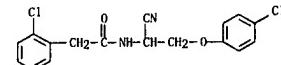
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 RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 (prepns. of aminoacetonitrile derivs. as agricultural and horticultural insecticides)

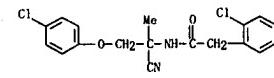
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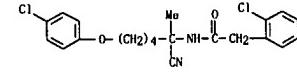
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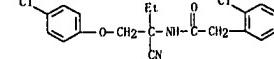
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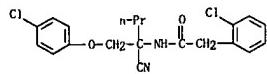


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 CN Benzenecarboxamide, 2-chloro-N-[1-(4-chlorophenoxy)methyl]-1-cyano-1-propyl- (CA INDEX NAME)

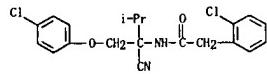


## L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

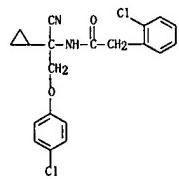
RN 247197-39-3 CAPLUS  
CN Benzenecetamide, 2-chloro-N-[1-[(4-chlorophenoxy)methyl]-1-cyanobutyl]-  
(CA INDEX NAME)



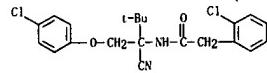
RN 247197-41-7 CAPLUS  
CN Benzenecetamide, 2-chloro-N-[1-[(4-chlorophenoxy)methyl]-1-cyano-2-methylpropyl]- (CA INDEX NAME)



RN 247197-43-9 CAPLUS  
CN Benzenecetamide, 2-chloro-N-[2-(4-chlorophenoxy)-1-cyano-1-cyclopropylethyl]- (CA INDEX NAME)

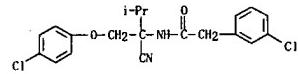


RN 247197-45-1 CAPLUS  
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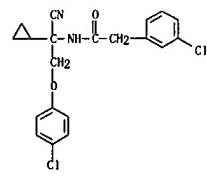


RN 247197-56-4 CAPLUS  
CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-2-fluoro-  
(CA INDEX NAME)

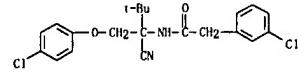
## L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



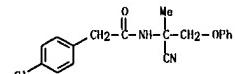
RN 247197-67-7 CAPLUS  
CN Benzenecetamide, 3-chloro-N-[2-(4-chlorophenoxy)-1-cyano-1-cyclopropylethyl]- (CA INDEX NAME)



RN 247197-68-8 CAPLUS  
CN Benzenecetamide, 3-chloro-N-[1-[(4-chlorophenoxy)methyl]-1-cyano-2,2-dimethylpropyl]- (CA INDEX NAME)

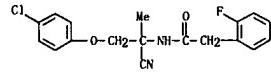


RN 247197-71-3 CAPLUS  
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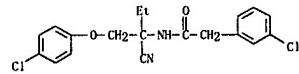


RN 247197-72-4 CAPLUS  
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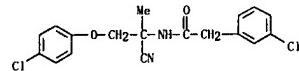
## L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



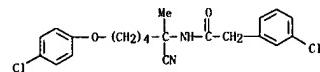
RN 247197-62-2 CAPLUS  
CN Benzenecetamide, 3-chloro-N-[1-[(4-chlorophenoxy)methyl]-1-cyanopropyl]-  
(CA INDEX NAME)



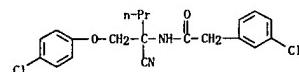
RN 247197-63-3 CAPLUS  
CN Benzenecetamide, 3-chloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-  
(CA INDEX NAME)



RN 247197-64-4 CAPLUS  
CN Benzenecetamide, 3-chloro-N-[5-(4-chlorophenoxy)-1-cyano-1-methylpentyl]-  
(CA INDEX NAME)

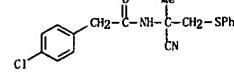


RN 247197-65-5 CAPLUS  
CN Benzenecetamide, 3-chloro-N-[1-[(4-chlorophenoxy)methyl]-1-cyanobutyl]-  
(CA INDEX NAME)

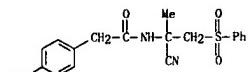


RN 247197-66-6 CAPLUS  
CN Benzenecetamide, 3-chloro-N-[1-[(4-chlorophenoxy)methyl]-1-cyano-2-methylpropyl]-  
(CA INDEX NAME)

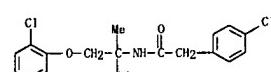
## L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



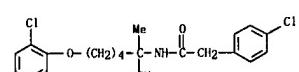
RN 247197-73-5 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-1-methyl-2-(phenylsulfonyl)ethyl]-  
(CA INDEX NAME)



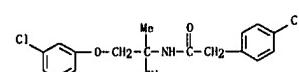
RN 247197-74-6 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[2-(2-chlorophenoxy)-1-cyano-1-methylethyl]-  
(CA INDEX NAME)



RN 247197-75-7 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[5-(2-chlorophenoxy)-1-cyano-1-methylpentyl]-  
(CA INDEX NAME)

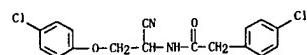


RN 247197-76-8 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[2-(3-chlorophenoxy)-1-cyano-1-methylethyl]-  
(CA INDEX NAME)

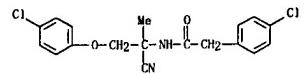


RN 247197-77-9 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[2-(4-chlorophenoxy)-1-cyanoethyl]-  
(CA INDEX NAME)

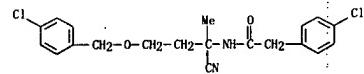
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



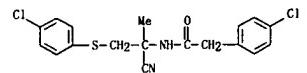
RN 247197-78-0 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-  
(CA INDEX NAME)



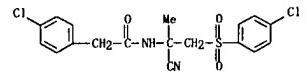
RN 247197-79-1 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[3-(4-chlorophenyl)methoxy]-1-cyano-1-methylpropyl]-  
(CA INDEX NAME)



RN 247197-80-4 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[2-(4-chlorophenyl)thio]-1-cyano-1-methylethyl]-  
(CA INDEX NAME)

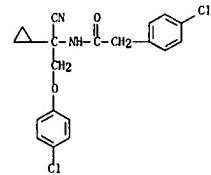


RN 247197-81-5 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[2-(4-chlorophenyl)sulfonyl]-1-cyano-1-methylethyl]-  
(CA INDEX NAME)

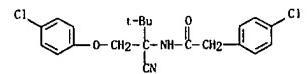


RN 247197-82-6 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[5-(4-chlorophenoxy)-1-cyano-1-methylpentyl]-  
(CA INDEX NAME)

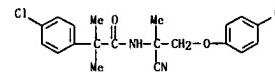
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



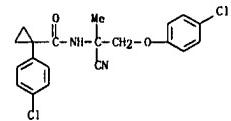
RN 247197-90-6 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-(4-chlorophenoxy)-1-cyano-2,2-dimethylpropyl]-  
(CA INDEX NAME)



RN 247197-96-2 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[2-(4-chlorophenoxy)-1-cyano-1-(2-methylpropyl)]-  
a,a-dimethyl-  
(CA INDEX NAME)

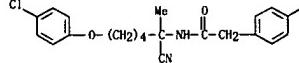


RN 247197-99-5 CAPLUS  
CN Cyclopropanecarboxamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-1-(4-chlorophenyl)-  
(CA INDEX NAME)

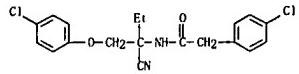


RN 247198-00-1 CAPLUS  
CN Cyclobutanecarboxamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-1-(4-chlorophenyl)-  
(CA INDEX NAME)

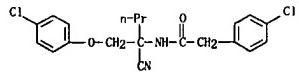
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



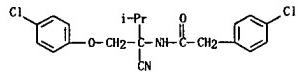
RN 247197-86-0 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-(4-chlorophenoxy)methyl]-1-cyanopropyl]-  
(CA INDEX NAME)



RN 247197-87-1 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-(4-chlorophenoxy)methyl]-1-cyanobutyl]-  
(CA INDEX NAME)



RN 247197-88-2 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-(4-chlorophenoxy)methyl]-1-cyano-2-methylpropyl]-  
(CA INDEX NAME)

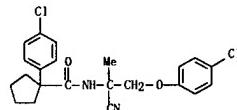


RN 247197-89-3 CAPLUS  
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(CA INDEX NAME)

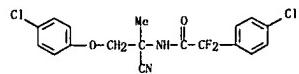
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



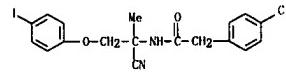
RN 247198-01-2 CAPLUS  
CN Cyclopentanecarboxamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-1-(4-chlorophenyl)-  
(CA INDEX NAME)



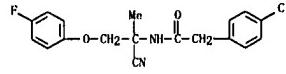
RN 247198-02-3 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-  
a,a-difluoro-  
(CA INDEX NAME)



RN 247198-03-4 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-2-(4-iodophenoxy)-1-methylethyl]-  
(CA INDEX NAME)

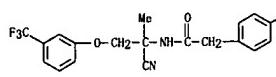


RN 247198-04-5 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-2-(4-fluorophenoxy)-1-methylethyl]-  
(CA INDEX NAME)

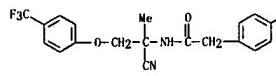


RN 247198-05-6 CAPLUS  
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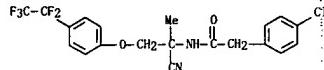
## L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



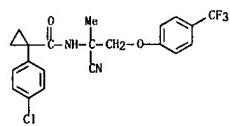
RN 247198-06-7 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



RN 247198-07-8 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[1-cyano-1-methyl-2-[4-(pentfluoroethyl)phenoxy]ethyl]- (9CI) (CA INDEX NAME)



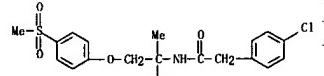
RN 247198-08-9 CAPLUS  
CN Cyclop propane carboxamide, 1-(4-chlorophenyl)-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



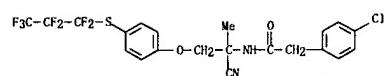
RN 247198-09-0 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[1-cyano-2-[4-(heptafluoropropyl)phenoxy]-1-methylethyl]- (9CI) (CA INDEX NAME)



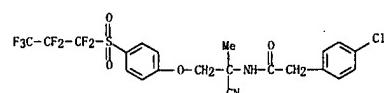
## L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



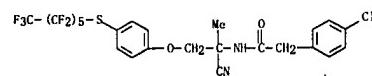
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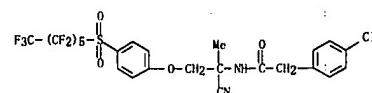
RN 247198-16-9 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[1-cyano-2-[4-[(heptafluoropropyl)sulfonyl]phenoxy]-1-methylethyl]- (9CI) (CA INDEX NAME)



RN 247198-17-0 CAPLUS  
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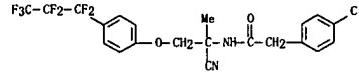


RN 247198-18-1 CAPLUS  
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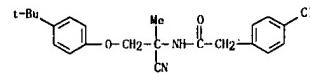


RN 247198-19-2 CAPLUS  
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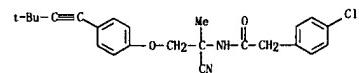
## L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



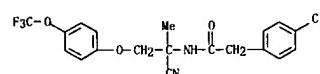
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CN Benzenacetamide, 4-chloro-N-[1-cyano-2-[4-(1,1-dimethylethyl)phenoxy]ethyl]- (CA INDEX NAME)



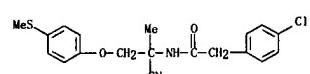
RN 247198-11-4 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[1-cyano-2-[4-(3,3-dimethyl-1-butynyl)phenoxy]ethyl]- (9CI) (CA INDEX NAME)



RN 247198-12-5 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethoxy)phenoxy]ethyl]- (CA INDEX NAME)

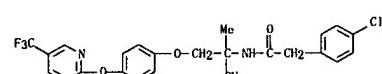


RN 247198-13-6 CAPLUS  
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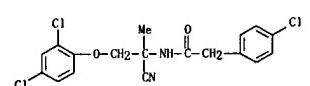


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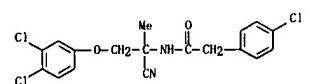
## L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



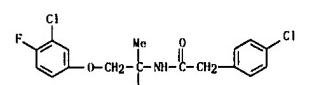
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CN Benzenacetamide, 4-chloro-N-[1-cyano-2-(2,4-dichlorophenoxy)-1-methylethyl]- (CA INDEX NAME)



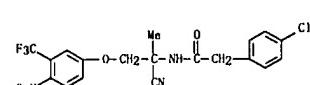
RN 247198-21-6 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[1-cyano-2-(3,4-dichlorophenoxy)-1-methylethyl]- (CA INDEX NAME)



RN 247198-22-7 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[1-cyano-2-(3-chloro-4-fluorophenoxy)-1-methylethyl]- (CA INDEX NAME)

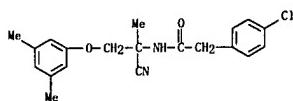


RN 247198-23-8 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[1-cyano-1-methyl-2-[4-nitro-3-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

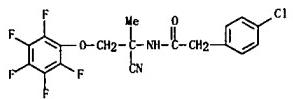


RN 247198-24-9 CAPLUS

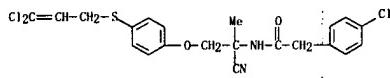
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 CN Benzenecetamide, 4-chloro-N-[1-cyano-2-(3,5-dimethylphenoxy)-1-methylethyl]- (CA INDEX NAME)



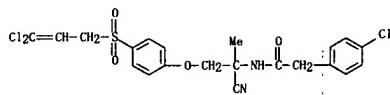
RN 247198-25-0 CAPLUS  
 CN Benzenecetamide, 4-chloro-N-[1-cyano-1-methyl-2-(pentafluorophenoxy)ethyl]- (9CI) (CA INDEX NAME)



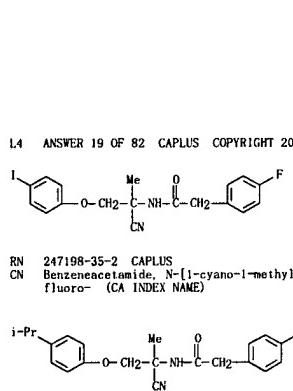
RN 247198-26-1 CAPLUS  
 CN Benzenecetamide, 4-chloro-N-[1-cyano-2-[4-(3,3-dichloro-2-propenyl)thiophenoxy]-1-methylethyl]- (9CI) (CA INDEX NAME)



RN 247198-27-2 CAPLUS  
 CN Benzenecetamide, 4-chloro-N-[1-cyano-2-[4-(3,3-dichloro-2-propenyl)sulfonyl]phenoxy]-1-methylethyl]- (9CI) (CA INDEX NAME)



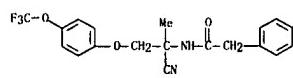
RN 247198-29-4 CAPLUS  
 CN Benzenecetamide, 4-chloro-N-[1-cyano-1-methyl-2-[4-(phenylethynyl)phenoxy]ethyl]- (9CI) (CA INDEX NAME)



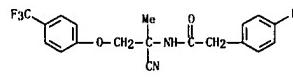
RN 247198-35-2 CAPLUS  
 CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-(1-methylethyl)phenoxy]ethyl]-4-fluoro- (CA INDEX NAME)



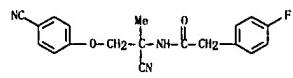
RN 247198-36-3 CAPLUS  
 CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethoxy)phenoxy]ethyl]-4-fluoro- (CA INDEX NAME)



RN 247198-37-4 CAPLUS  
 CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-fluoro- (CA INDEX NAME)



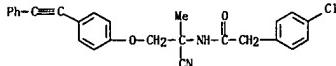
RN 247198-38-5 CAPLUS  
 CN Benzenecetamide, N-[1-cyano-2-(4-cyanophenoxy)-1-methylethyl]-4-fluoro- (CA INDEX NAME)



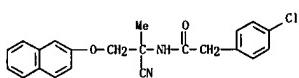
RN 247198-39-6 CAPLUS  
 CN Benzenecetamide, N-[1-cyano-1-methyl-2-(4-nitrophenoxy)ethyl]-4-fluoro- (CA INDEX NAME)



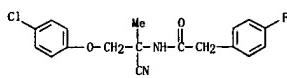
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



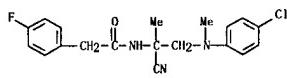
RN 247198-30-7 CAPLUS  
 CN Benzenecetamide, 4-chloro-N-[1-cyano-1-methyl-2-(2-naphthalenyloxy)ethyl]- (CA INDEX NAME)



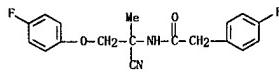
RN 247198-31-8 CAPLUS  
 CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-4-fluoro- (CA INDEX NAME)



RN 247198-32-9 CAPLUS  
 CN Benzenecetamide, N-[2-(4-chlorophenyl)methylamino]-1-cyano-1-methylethyl]-4-fluoro- (CA INDEX NAME)

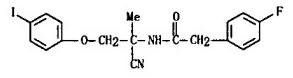


RN 247198-33-0 CAPLUS  
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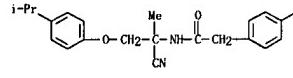


RN 247198-34-1 CAPLUS  
 CN Benzenecetamide, N-[1-cyano-2-(4-iodophenoxy)-1-methylethyl]-4-fluoro- (CA INDEX NAME)

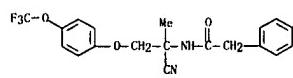
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



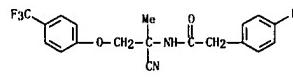
RN 247198-35-2 CAPLUS  
 CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-(1-methylethyl)phenoxy]ethyl]-4-fluoro- (CA INDEX NAME)



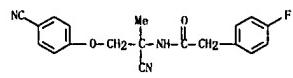
RN 247198-36-3 CAPLUS  
 CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethoxy)phenoxy]ethyl]-4-fluoro- (CA INDEX NAME)



RN 247198-37-4 CAPLUS  
 CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-fluoro- (CA INDEX NAME)



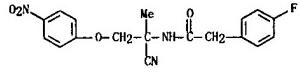
RN 247198-38-5 CAPLUS  
 CN Benzenecetamide, N-[1-cyano-2-(4-cyanophenoxy)-1-methylethyl]-4-fluoro- (CA INDEX NAME)



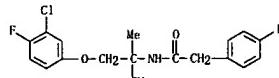
RN 247198-39-6 CAPLUS  
 CN Benzenecetamide, N-[1-cyano-1-methyl-2-(4-nitrophenoxy)ethyl]-4-fluoro- (CA INDEX NAME)



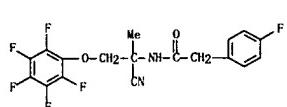
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



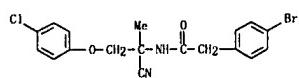
RN 247198-40-9 CAPLUS  
 CN Benzenecetamide, N-[2-(3-chloro-4-fluorophenoxy)-1-cyano-1-methylethyl]-4-fluoro- (CA INDEX NAME)



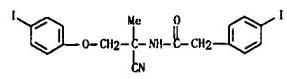
RN 247198-41-0 CAPLUS  
 CN Benzenecetamide, N-[1-cyano-1-methyl-2-(pentafluorophenoxy)ethyl]-4-fluoro- (9CI) (CA INDEX NAME)



RN 247198-43-2 CAPLUS  
 CN Benzenecetamide, 4-bromo-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

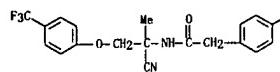


RN 247198-45-4 CAPLUS  
 CN Benzenecetamide, N-[1-cyano-2-(4-iodophenoxy)-1-methylethyl]-4-iodo- (CA INDEX NAME)

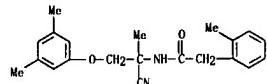


RN 247198-46-5 CAPLUS  
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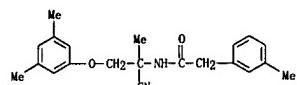
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



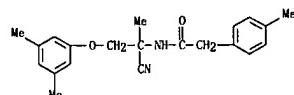
RN 247198-47-6 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(3,5-dimethylphenoxy)-1-methylethyl]-2-methyl- (CA INDEX NAME)



RN 247198-48-7 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(3,5-dimethylphenoxy)-1-methylethyl]-3-methoxy- (CA INDEX NAME)

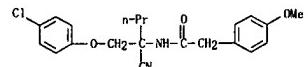


RN 247198-49-8 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(3,5-dimethylphenoxy)-1-methylethyl]-4-methyl- (CA INDEX NAME)

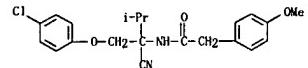


RN 247198-50-1 CAPLUS  
CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-3-(trifluoromethyl)- (CA INDEX NAME)

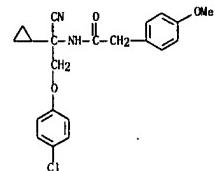
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



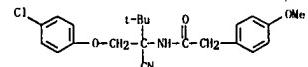
RN 247198-60-3 CAPLUS  
CN Benzenecetamide, N-[1-(4-chlorophenoxy)methyl]-1-cyano-2-methylpropyl]-4-methoxy- (CA INDEX NAME)



RN 247198-61-4 CAPLUS  
CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-cyclopropylethyl]-4-methoxy- (CA INDEX NAME)

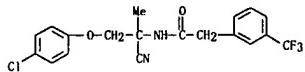


RN 247198-62-5 CAPLUS  
CN Benzenecetamide, N-[1-(4-chlorophenoxy)methyl]-1-cyano-2,2-dimethylpropyl]-4-methoxy- (CA INDEX NAME)

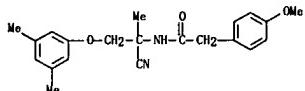


RN 247198-64-7 CAPLUS  
CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-4-heptafluoropropyl- (9CI) (CA INDEX NAME)

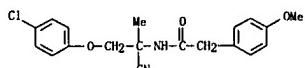
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



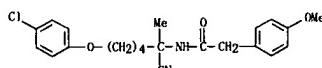
RN 247198-51-2 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(3,5-dimethylphenoxy)-1-methylethyl]-4-methoxy- (CA INDEX NAME)



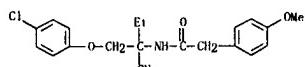
RN 247198-52-3 CAPLUS  
CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-4-methoxy- (CA INDEX NAME)



RN 247198-57-9 CAPLUS  
CN Benzenecetamide, N-[5-(4-chlorophenoxy)-1-cyano-1-methylpentyl]-4-methoxy- (CA INDEX NAME)

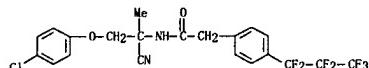


RN 247198-58-9 CAPLUS  
CN Benzenecetamide, N-[1-(4-chlorophenoxy)methyl]-1-cyanopropyl]-4-methoxy- (CA INDEX NAME)

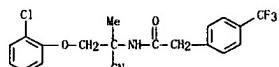


RN 247198-59-0 CAPLUS  
CN Benzenecetamide, N-[1-(4-chlorophenoxy)methyl]-1-cyanobutyl]-4-methoxy- (CA INDEX NAME)

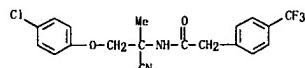
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



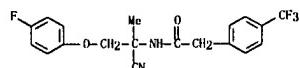
RN 247198-65-8 CAPLUS  
CN Benzenecetamide, N-[2-(2-chlorophenoxy)-1-cyano-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



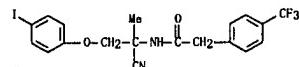
RN 247198-66-9 CAPLUS  
CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



RN 247198-67-0 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(4-fluorophenoxy)-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)

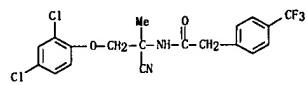


RN 247198-68-1 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(4-iodophenoxy)-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)

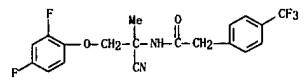


RN 247198-69-2 CAPLUS  
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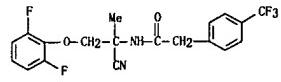
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



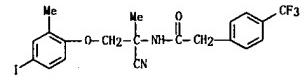
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CN Benzenecetamide, N-[1-cyano-2-(2,4-difluorophenoxy)-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



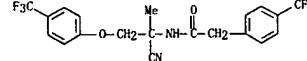
RN 247198-71-6 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(2,6-difluorophenoxy)-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



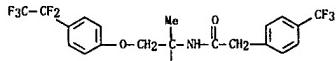
RN 247198-72-7 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(4-iodo-2-methylphenoxy)-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



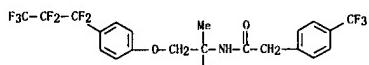
RN 247198-73-8 CAPLUS  
CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



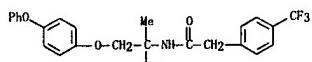
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
RN 247198-74-9 CAPLUS  
CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-(pentfluoroethyl)phenoxy]ethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



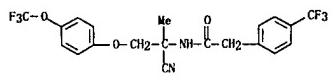
RN 247198-75-0 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-[4-(heptafluoropropyl)phenoxy]-1-methylethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



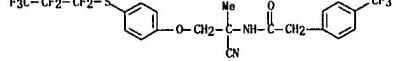
RN 247198-76-1 CAPLUS  
CN Benzenecetamide, N-[1-cyano-1-methyl-2-(4-phenoxyphenoxy)ethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



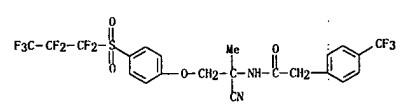
RN 247198-77-2 CAPLUS  
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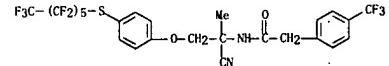
RN 247198-78-3 CAPLUS  
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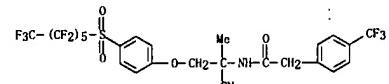
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
RN 247198-79-4 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-[4-(heptafluoropropyl)sulfonyl]phenoxy]-1-methylethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



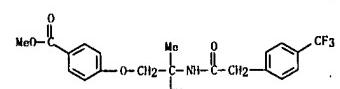
RN 247198-80-7 CAPLUS  
CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-[(tridecafluorohexyl)thiophenoxy]ethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 247198-81-8 CAPLUS  
CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-[(tridecafluorohexyl)sulfonyloxy]ethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

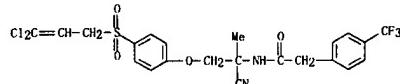


RN 247198-82-9 CAPLUS  
CN Benzoic acid, 4-[2-cyano-2-[[4-(trifluoromethyl)phenyl]acetyl]amino]propoxy-, methyl ester (9CI) (CA INDEX NAME)

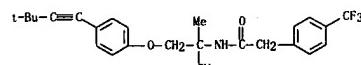


RN 247198-83-0 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-[4-(3,3-dichloro-2-propenyl)sulfonyl]phenoxy]-1-methylethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

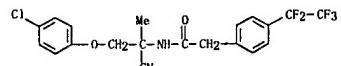
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



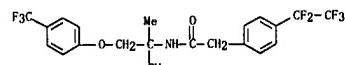
RN 247198-84-1 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-[4-(3,3-dimethyl-1-butynyl)phenoxy]-1-methylethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



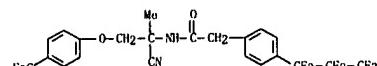
RN 247198-86-3 CAPLUS  
CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-4-(pentfluoroethyl)- (9CI) (CA INDEX NAME)



RN 247198-87-4 CAPLUS  
CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(pentfluoroethyl)- (9CI) (CA INDEX NAME)

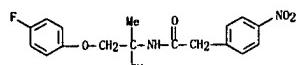


RN 247198-88-5 CAPLUS  
CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(heptafluoropropyl)- (9CI) (CA INDEX NAME)

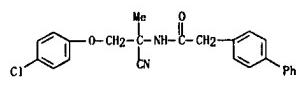


RN 247198-89-6 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(4-fluorophenoxy)-1-methylethyl]-4-nitro- (CA INDEX NAME)

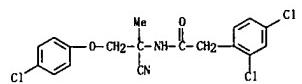
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



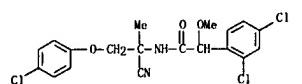
RN 247198-90-9 CAPLUS  
[1,1'-Biphenyl]-4-acetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



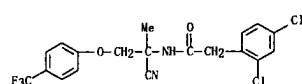
RN 247198-91-0 CAPLUS  
Benzeneacetamide, 2,4-dichloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



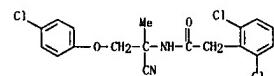
RN 247198-92-1 CAPLUS  
Benzeneacetamide, 2,4-dichloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-a-methoxy- (CA INDEX NAME)



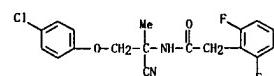
RN 247198-93-2 CAPLUS  
Benzeneacetamide, 2,4-dichloro-N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



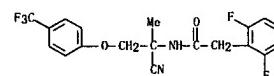
RN 247198-94-3 CAPLUS

L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
CN Benzenecacetamide, 2,6-dichloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

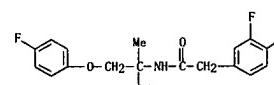
RN 247198-95-4 CAPLUS  
Benzeneacetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-2,6-difluoro- (CA INDEX NAME)



RN 247198-96-5 CAPLUS  
Benzeneacetamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxy]ethyl]-2,6-difluoro- (CA INDEX NAME)

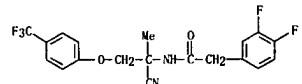


RN 247198-97-6 CAPLUS  
Benzeneacetamide, N-[1-cyano-2-(4-fluorophenoxy)-1-methylethyl]-3,4-difluoro- (CA INDEX NAME)

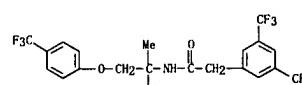


RN 247198-98-7 CAPLUS  
Benzeneacetamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxy]ethyl]-3,4-difluoro- (CA INDEX NAME)

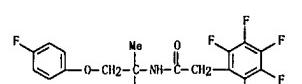
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



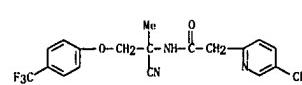
RN 247198-99-8 CAPLUS  
Benzeneacetamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxy]ethyl]-3,5-bis(trifluoromethyl)- (CA INDEX NAME)



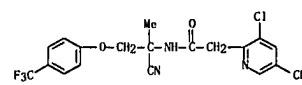
RN 247199-01-5 CAPLUS  
Benzeneacetamide, N-[1-cyano-2-(4-fluorophenoxy)-1-methylethyl]-2,3,4,5,6-pentafluoro- (CA INDEX NAME)



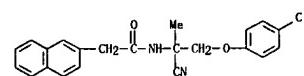
RN 247199-02-6 CAPLUS  
2-Pyridineacetamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxy]ethyl]-5-(trifluoromethyl)- (CA INDEX NAME)



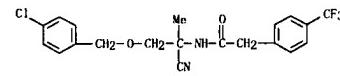
RN 247199-03-7 CAPLUS  
2-Pyridineacetamide, 3-chloro-N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxy]ethyl]-5-(trifluoromethyl)- (CA INDEX NAME)



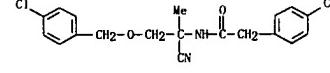
RN 247199-04-8 CAPLUS

L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
CN 2-Naphthaleneacetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

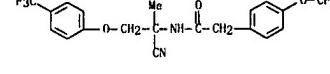
RN 247199-05-9 CAPLUS  
Benzeneacetamide, N-[2-(4-chlorophenyl)methoxy]-1-cyano-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



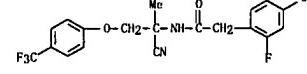
RN 247199-06-0 CAPLUS  
Benzeneacetamide, 4-chloro-N-[2-(4-chlorophenyl)methoxy]-1-cyano-1-methylethyl]- (CA INDEX NAME)



RN 247199-09-3 CAPLUS  
Benzeneacetamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)

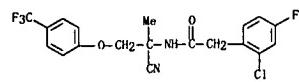


RN 247199-10-6 CAPLUS  
Benzeneacetamide, 4-chloro-N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxy]ethyl]-2-fluoro- (CA INDEX NAME)

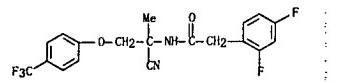


RN 247199-11-7 CAPLUS  
Benzeneacetamide, 2-chloro-N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-fluoro- (CA INDEX NAME)

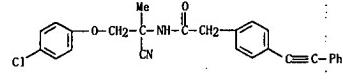
## L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



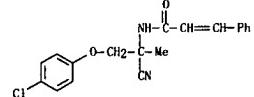
RN 247199-12-8 CAPLUS  
CN Benzeneacetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2,4-difluoro- (CA INDEX NAME)



RN 247199-13-9 CAPLUS  
CN Benzeneacetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-4-(phenylethylnyl)- (9CI) (CA INDEX NAME)

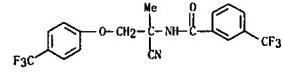


RN 247199-14-0 CAPLUS  
CN 2-Propenamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-3-phenyl- (CA INDEX NAME)

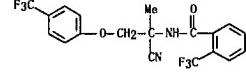


RN 247199-15-1 CAPLUS  
CN 2-Propenamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-3-phenyl- (CA INDEX NAME)

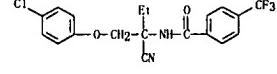
## L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



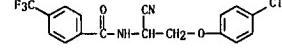
RN 247199-22-0 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2-(trifluoromethyl)- (CA INDEX NAME)



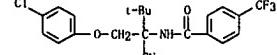
RN 247199-23-1 CAPLUS  
CN Benzamide, N-[1-(4-chlorophenoxy)methyl]-1-cyanopropyl]-4-(trifluoromethyl)- (CA INDEX NAME)



RN 247199-24-2 CAPLUS  
CN Benzamide, N-[2-(4-chlorophenoxy)-1-cyanoethyl]-4-(trifluoromethyl)- (CA INDEX NAME)

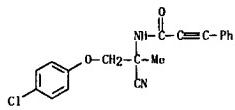


RN 247199-25-3 CAPLUS  
CN Benzamide, N-[1-(4-chlorophenoxy)methyl]-1-cyano-2,2-dimethylpropyl-4-(trifluoromethyl)- (CA INDEX NAME)

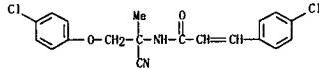


RN 247199-28-6 CAPLUS  
CN Benzamide, 4-chloro-N-[1-cyano-2-[2,6-dichloro-4-[(3,3-dichloro-2-propenyl)oxy]phenoxy]-1-methylethyl]- (9CI) (CA INDEX NAME)

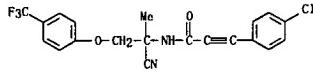
## L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



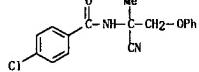
RN 247199-17-3 CAPLUS  
CN 2-Propenamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-3-(4-chlorophenyl)- (CA INDEX NAME)



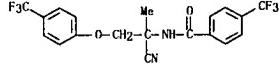
RN 247199-18-4 CAPLUS  
CN 2-Propenamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



RN 247199-19-5 CAPLUS  
CN Benzamide, 4-chloro-N-(1-cyano-1-methyl-2-phenoxyethyl)- (CA INDEX NAME)

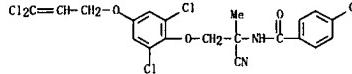


RN 247199-20-6 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(trifluoromethyl)- (CA INDEX NAME)

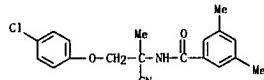


RN 247199-21-9 CAPLUS

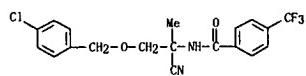
## L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



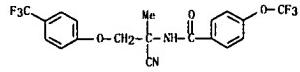
RN 247199-31-1 CAPLUS  
CN Benzamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-3,5-dimethyl- (CA INDEX NAME)



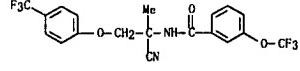
RN 247199-32-2 CAPLUS  
CN Benzamide, N-[1-(4-chlorophenyl)ethoxy]-1-cyano-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



RN 247199-33-3 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)

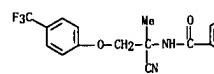


RN 247199-34-4 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-3-(trifluoromethoxy)- (CA INDEX NAME)

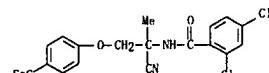


RN 247199-35-6 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-fluoro- (CA INDEX NAME)

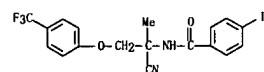
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



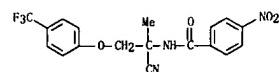
RN 247199-37-7 CAPLUS  
CN Benzamide, 2,4-dichloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



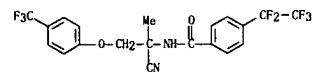
RN 247199-38-8 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-iodo- (CA INDEX NAME)



RN 247199-39-9 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-nitro- (CA INDEX NAME)

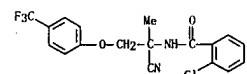


RN 247199-40-2 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(pentafluoroethyl)- (CA INDEX NAME)

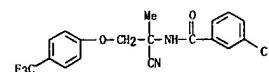


RN 247199-41-3 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethoxy)phenoxy]ethyl]-4-(trifluoromethyl)- (CA INDEX NAME)

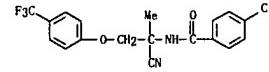
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
RN 247199-46-8 CAPLUS  
CN Benzamide, 2-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



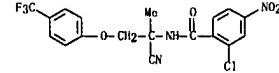
RN 247199-47-9 CAPLUS  
CN Benzamide, 3-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



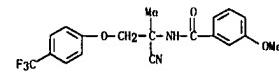
RN 247199-48-0 CAPLUS  
CN Benzamide, 4-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



RN 247199-49-1 CAPLUS  
CN Benzamide, 2-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-nitro- (CA INDEX NAME)

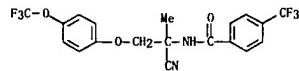


RN 247199-50-4 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-3-methoxy- (CA INDEX NAME)

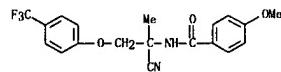


RN 247199-51-5 CAPLUS  
CN Benzamide, 3,4-dichloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

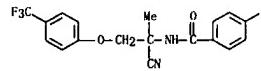
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



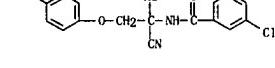
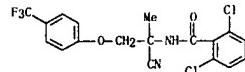
RN 247199-42-4 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-methoxy- (CA INDEX NAME)



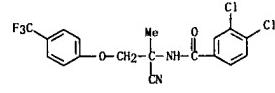
RN 247199-43-5 CAPLUS  
CN Benzamide, 4-cyano-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



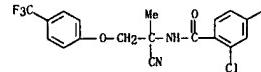
RN 247199-44-6 CAPLUS  
CN Benzamide, 2,6-dichloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



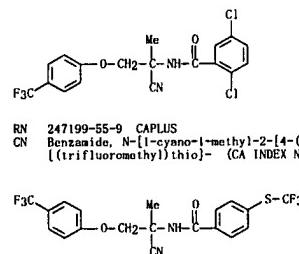
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
[1-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



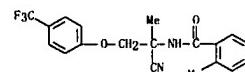
RN 247199-52-6 CAPLUS  
CN Benzamide, 2-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-fluoro- (CA INDEX NAME)



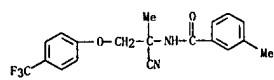
RN 247199-55-9 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(trifluoromethyl)thio- (CA INDEX NAME)



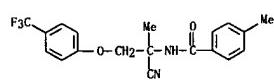
RN 247199-56-0 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2-methyl- (CA INDEX NAME)



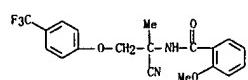
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 RN 247199-57-1 CAPLUS  
 CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-3-methyl- (CA INDEX NAME)



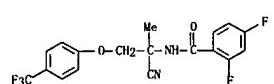
RN 247199-58-2 CAPLUS  
 CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-methyl- (CA INDEX NAME)



RN 247199-59-3 CAPLUS  
 CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2-methoxy- (CA INDEX NAME)



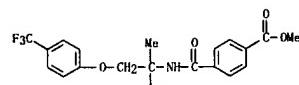
RN 247199-60-6 CAPLUS  
 CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2,4-difluoro- (CA INDEX NAME)



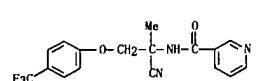
RN 247199-61-7 CAPLUS  
 CN 3-Pyridinecarboxamide, 5,6-dichloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



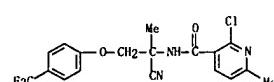
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 RN 247199-66-2 CAPLUS  
 CN Benzoic acid, 4-[[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]amino]carbonyl-, methyl ester (CA INDEX NAME)



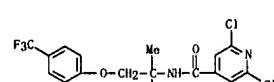
RN 247199-67-3 CAPLUS  
 CN 3-Pyridinecarboxamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



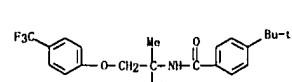
RN 247199-68-4 CAPLUS  
 CN 3-Pyridinecarboxamide, 2-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-6-methyl- (CA INDEX NAME)



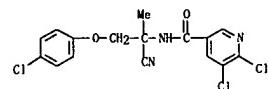
RN 247199-69-5 CAPLUS  
 CN 4-Pyridinecarboxamide, 2,6-dichloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



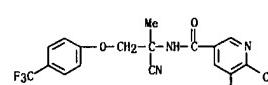
RN 247199-70-8 CAPLUS  
 CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(1,1-dimethylethyl)- (CA INDEX NAME)



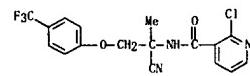
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



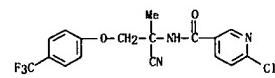
RN 247199-62-8 CAPLUS  
 CN 3-Pyridinecarboxamide, 5,6-dichloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



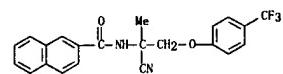
RN 247199-63-9 CAPLUS  
 CN 3-Pyridinecarboxamide, 2-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



RN 247199-64-0 CAPLUS  
 CN 3-Pyridinecarboxamide, 6-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

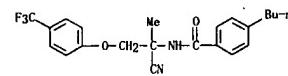


RN 247199-65-1 CAPLUS  
 CN 2-Naphthalene carboxamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

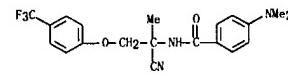


L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

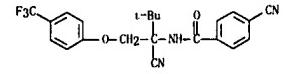
RN 247199-71-9 CAPLUS  
 CN Benzamide, 4-butyl-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



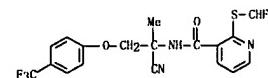
RN 247199-72-0 CAPLUS  
 CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(dimethylamino)- (CA INDEX NAME)



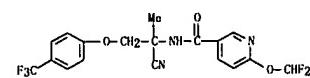
RN 247199-73-1 CAPLUS  
 CN Benzamide, 4-cyano-N-[1-cyano-2,2-dimethyl-1-[(4-(trifluoromethyl)phenoxy)methyl]propyl]- (CA INDEX NAME)



RN 247199-74-2 CAPLUS  
 CN 3-Pyridinecarboxamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2-[(difluoromethyl)thio]- (CA INDEX NAME)

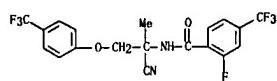


RN 247199-75-3 CAPLUS  
 CN 3-Pyridinecarboxamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-6-(difluoromethoxy)- (CA INDEX NAME)

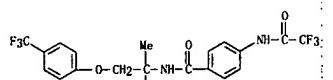


RN 247199-76-4 CAPLUS  
 CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2-

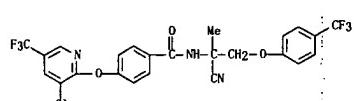
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
fluoro-4-(trifluoromethyl)- (CA INDEX NAME)



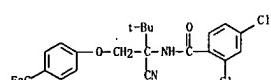
RN 247199-77-5 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-[(trifluoroacetyl)amino]- (9CI) (CA INDEX NAME)



RN 247199-78-6 CAPLUS  
CN Benzamide, 4-[[3-chloro-5-(trifluoromethyl)-2-pyridinyl]oxy]-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

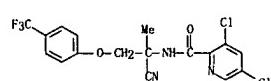


RN 247199-79-7 CAPLUS  
CN Benzamide, 2,4-dichloro-N-[1-cyano-2,2-dimethyl-1-[(4-(trifluoromethyl)phenoxy)methyl]propyl]- (CA INDEX NAME)

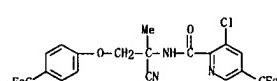


RN 247199-80-0 CAPLUS  
CN Benzamide, 2,4-dichloro-N-[1-cyano-2-methyl-1-[(4-(trifluoromethyl)phenoxy)methyl]propyl]- (CA INDEX NAME)

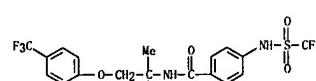
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
2-Pyridinecarboxamide, 3,5-dichloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



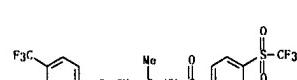
RN 247199-89-9 CAPLUS  
CN 2-Pyridinecarboxamide, 3-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-5-(trifluoromethyl)- (CA INDEX NAME)



RN 247199-90-2 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-[(trifluoromethyl)sulfonyl]amino]- (CA INDEX NAME)

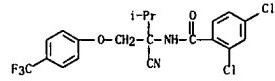


RN 247199-92-4 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-[(trifluoromethyl)sulfonyl]- (CA INDEX NAME)

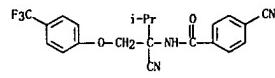


RN 247199-93-5 CAPLUS  
CN 1-Naphthalenecarboxamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

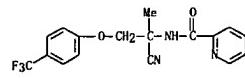
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



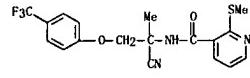
RN 247199-81-1 CAPLUS  
CN Benzamide, 4-cyano-N-[1-cyano-2-methyl-1-[(4-(trifluoromethyl)phenoxy)methyl]propyl]- (CA INDEX NAME)



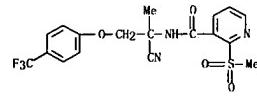
RN 247199-85-5 CAPLUS  
CN 2-Pyridinecarboxamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



RN 247199-86-6 CAPLUS  
CN 3-Pyridinecarboxamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2-(methylthio)- (CA INDEX NAME)

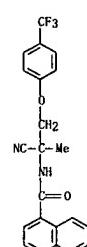


RN 247199-87-7 CAPLUS  
CN 3-Pyridinecarboxamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2-(methylsulfonyl)- (CA INDEX NAME)

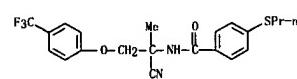


RN 247199-88-8 CAPLUS

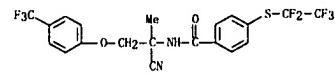
L4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



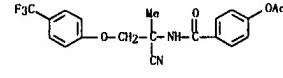
RN 247199-94-6 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(propylthio)- (CA INDEX NAME)



RN 247199-95-7 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-[(pentafluoroethyl)thio]- (9CI) (CA INDEX NAME)

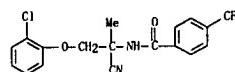


RN 247201-37-2 CAPLUS  
CN Benzamide, 4-(acetoxy)-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

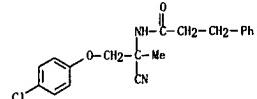


RN 438548-44-8 CAPLUS  
CN Benzamide, N-[2-(2-chlorophenoxy)-1-cyano-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)

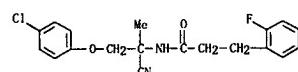
## I.4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



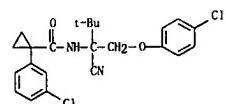
RN 736172-72-8 CAPLUS  
CN Benzenepropanamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



RN 736172-75-1 CAPLUS  
CN Benzenepropanamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-2-fluoro- (CA INDEX NAME)

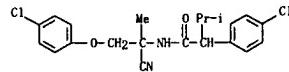


RN 736172-78-4 CAPLUS  
CN Cyclopropanecarboxamide, N-[1-[(4-chlorophenoxy)methyl]-1-cyano-2,2-dimethylpropyl]-1-(3-chlorophenyl)- (CA INDEX NAME)

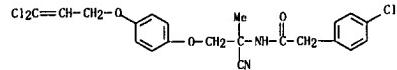


RN 736172-82-0 CAPLUS  
CN Benzenecacetamide, 4-chloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- $\alpha$ -(1-methylethyl)- (CA INDEX NAME)

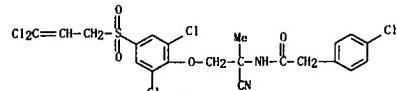
## I.4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



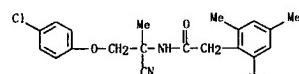
RN 736172-83-1 CAPLUS  
CN Benzenecacetamide, 4-chloro-N-[1-cyano-2-[4-(3,3-dichloro-2-propenyl)oxy]phenoxy]-1-methylethyl- (9CI) (CA INDEX NAME)



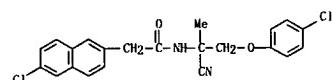
RN 736172-86-4 CAPLUS  
CN Benzenecacetamide, 4-chloro-N-[1-cyano-2-[2,6-dichloro-4-[(3,3-dichloro-2-propenyl)sulfonyl]phenoxy]-1-methylethyl]- (9CI) (CA INDEX NAME)



RN 736172-89-7 CAPLUS  
CN Benzenecacetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-2,4,6-trimethyl- (CA INDEX NAME)

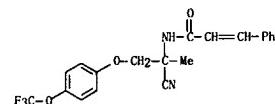


RN 736172-90-0 CAPLUS  
CN 2-Naphthalenecacetamide, 6-chloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

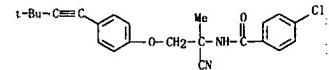


## I.4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

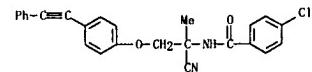
RN 736172-91-1 CAPLUS  
CN 2-Propenamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethoxy)phenoxy]ethyl]-3-phenyl- (CA INDEX NAME)



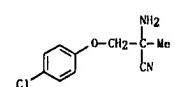
RN 736172-92-2 CAPLUS  
CN Benzenamide, 4-chloro-N-[1-cyano-2-[4-(3,3-dimethyl-1-butynyl)phenoxy]-1-methylethyl]- (9CI) (CA INDEX NAME)



RN 736172-93-3 CAPLUS  
CN Benzenamide, 4-chloro-N-[1-cyano-1-methyl-2-[4-(phenylethynyl)phenoxy]ethyl]- (9CI) (CA INDEX NAME)

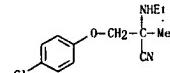


IT 247199-97-9P 247199-98-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of aminoacetonitrile derivs. as agricultural and horticultural insecticides)  
RN 247199-97-9 CAPLUS  
CN Propanenitrile, 2-amino-3-(4-chlorophenoxy)-2-methyl- (CA INDEX NAME)

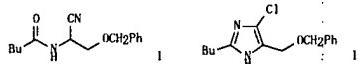


RN 247199-98-0 CAPLUS  
CN Propanenitrile, 3-(4-chlorophenoxy)-2-(ethylamino)-2-methyl- (CA INDEX NAME)

## I.4 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

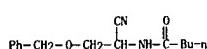


L4 ANSWER 20 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:141807 CAPLUS  
 DOCUMENT NUMBER: 140:339247  
 TITLE: New Method for the Synthesis of Diversely Functionalized Imidazoles from N-Acylated  $\alpha$ -Aminonitriles  
 AUTHOR(S): Zhong, Yong-Li; Lee, Jemsoon; Reamer, Robert A.; Askin, David  
 CORPORATE SOURCE: Department of Process Research, Merck Research Laboratories, Rahway, NJ, 07065, USA  
 SOURCE: Organic Letters (2004), 6(6), 929-931  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 140:339247  
 GRAPHIC IMAGE:



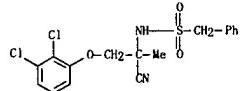
**ABSTRACT:**  
 A new general method for the synthesis of medicinally important diversely functionalized imidazoles from N-acylated  $\alpha$ -aminonitriles has been developed. N-Acylated  $\alpha$ -aminonitriles were reacted with triphenylphosphine and carbon tetrahalide to afford 2,4-disubstituted 5-halo-1H-imidazoles in good yield. This new method was applied for the synthesis of 2-butyl-4-chloro-5-hydroxymethylimidazole. These halimidazoles can be directly converted to 2,4,5-trisubstituted imidazoles through palladium-catalyzed coupling reactions. The reaction of [1-cyano-2-(phenylmethoxy)ethyl]imidamide (I) with tetrakis(triphenylphosphine)palladium gave 2-butyl-4-chloro-5-[(phenylmethoxy)methyl]-1H-imidazole (II) which upon deprotection gave 2-butyl-5-chloro-1H-imidazole-4-methanol, a synthetic intermediate for cozaar.

IT 679412-75-OP  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of functionalized imidazoles by triphenylphosphine-mediated reaction of halomethanes with N-(cyanomethyl) amides)  
 RN 679412-75-0 CAPLUS  
 CN Pentanamide, N-[1-cyano-2-(phenylmethoxy)ethyl]- (CA INDEX NAME)



REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 21 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 CN Benzenemethanesulfonamide, N-[1-cyano-2-(2,3-dichlorophenoxy)-1-methylethyl]- (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 21 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:2845 CAPLUS  
 DOCUMENT NUMBER: 140:59401  
 TITLE: N-sulfonylaminocetonitriles having pesticidal properties  
 INVENTOR(S): Steiger, Arthur; Zambach, Werner; Bouvier, Jacques;  
 Ducray, Pierre; Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.  
 PATENT ASSIGNEE(S): PCT Int. Appl.: 60 pp.  
 SOURCE: CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004000798	A1	20031231	WO 2003-EP6483	20030618
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GL, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, LZ, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW				
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
CA 2490123	A1	20031231	CA 2003-2490123	20030618
AU 2003242735	A1	20040106	AU 2003-242735	20030618
AU 2003242735	B2	20070419		
BR 200301967	A	20050329	BR 2003-11967	20030618
EP 1517887	A1	20050330	EP 2004-760656	20030618
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE, MC, PT, SI, SI, LT, LV, FI, NO, XK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1662489	A	20050831	CN 2003-814364	20030618
JP 2005529967	T	20051006	JP 2004-514794	20030618
NZ 527039	A	20070126	NZ 2003-537039	20030618
ZA 2004009580	A	20060628	ZA 2004-9580	20041126
IN 2004CN02828	A	20060210	IN 2004-CN2828	20041214
MX 2004PA12755	A	20050323	MX 2004-PA12755	20041215
US 2005522448	A1	20051006	US 2005-518063	20050118
PRIORITY APPLN. INFO.:			GB 2002-14117	A 20020619
			WO 2003-EP6483	W 20030618

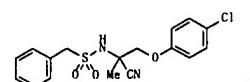
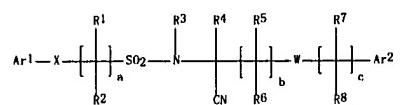
OTHER SOURCE(S): MARPAT 140:59401  
**ABSTRACT:**  
 The title compds. R2SO2NR3(CN)R4[(CR5R6)X]nR1 [I]: R1 = (un)substituted (hetero)aryl; R2 = alky, haloalkyl, cycloalkyl, etc.; R3 = H, alkyl, haloalkyl, etc.; R4-R6 = H, halo, alkyl, etc., or R4-R5 together with the carbon atoms to which they are attached form an (un)saturated five-membered heterocyclic ring; R6-X-R7 are selected from N, O and S; X = O, S, SO2, SO, SO2F, etc. [I] which have advantageous pesticidal properties, and are suitable, in particular, for the control of parasites in warm-blooded animals (no biol. data). were prepared. Preparation of N-[1-cyano-1-(2,3-dichlorophenoxy)ethyl]-C-phenylmethanesulfonamide is described (no data for intermediates and target compound). Pharmaceutical composition comprising the compound I is claimed.

IT 638207-94-OP  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (use of N-sulfonylaminocetonitriles having pesticidal properties)  
 RN 638207-94-0 CAPLUS

L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:2844 CAPLUS  
 DOCUMENT NUMBER: 140:59414  
 TITLE: Preparation of  $\alpha$ -sulfonylaminocetonitrile derivatives useful in controlling and preventing the infestation of plants by phytopathogenic microorganisms, particularly fungi  
 INVENTOR(S): Eberle, Martin; Stierli, Daniel; Mueller, Urs Syngenta Participations Ag, Switz.  
 PATENT ASSIGNEE(S): PCT Int. Appl.: 87 pp.  
 SOURCE: CODEN: PIIXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004000797	A1	20031231	WO 2003-EP6482	20030618
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GL, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, LZ, LK, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, ND, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, CM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UC, ZM, ZW, AN, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CR, CY, CZ, DE, DK, GE, GS, PR, PT, RU, SE, SI, SK, TR, BF, BJ, CF, CG, CI, GA, GN, GO, GW, ML, NE, SN, TD, TG				
AU 2003279387	A1	20040106	AU 2003-279387	20030618
EP 1513802	A1	20050316	EP 2003-740286	20030618
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, NK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 20055229966	T	20051006	JP 2004-514793	20030618
US 20055234125	A1	20051020	US 2004-517977	20041215
PRIORITY APPLN. INFO.:			GB 2002-14116	A 20020619
			WO 2003-EP6482	W 20030618

OTHER SOURCE(S): MARPAT 140:59414  
 GRAPHIC IMAGE:



**ABSTRACT:**  
 The invention relates to  $\alpha$ -sulfonylaminocetonitrile derivs. of the formula I [wherein: Ar1, Ar2 = (un)substituted (hetero)aryl; R1, R2, R5, R6,

## L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

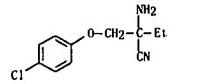
R7, R8 = H, (un)substituted alkyl, (un)substituted alk(en/yn)yl, (un)substituted cycloalkyl; R3 = H, alk(en/yn)yl, (un)substituted alkyl; R4 = as given for R1 except H: W = O, S(O)m, NR3: X = direct bond or O, S(O), NR3: a, b = 1, 2, 3; c = 0, 1, 2]. Comps. I possess useful plant protecting properties and may advantageously be employed in agricultural practice for controlling or preventing the infestation of plants by phytopathogenic microorganisms, esp. fungi. In particular, prep. u-sulfonylaminoo-acetonitrile I (wherein R1 = R2 = R3 = R5 = R6 = H, R1 = CH3; Ar1 = Ph; Ar2 = p-CIC6H4; W = O; X = direct bond; a, b = 1; c = 0) (II) has shown good fungicidal action against *Plasmopara viticola* on vines, and against Phytophthora on tomato and potato plants, at 200 ppm.

Phytophthora on tomato and potato plants, at 200 ppm.

IT 638209-24-2P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reaction or result); U (Use);  
U (Use): specific: preparation of u-sulfonylaminoo-acetonitrile derivs. and their use in preventing or controlling plants infestation by phytopathogenic microorganisms)

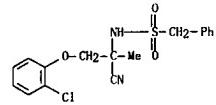
RN 638209-24-2 CAPLUS

CN Butanenitrile, 2-amino-2-[(4-chlorophenoxy)methyl]- (CA INDEX NAME)

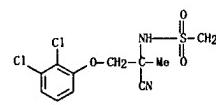


IT 638207-90-6P, 2-(4-Chlorophenoxymethyl)-2-benzylsulfonamidopropionitrile 638207-91-7P,  
2-(4-Chlorophenoxy-methyl)-2-benzylsulfonamino-butyronitrile 638207-92-8P, 2-(4-Chlorophenoxymethyl)-2-(4-chlorophenoxymethylsulfonamino)-propionitrile 638207-93-9P  
638207-94-0P 638207-95-1P 638207-96-2P  
638207-97-3P 638207-98-4P 638207-99-5P  
638208-00-1P 638208-01-2P 638208-02-3P  
638208-03-4P 638208-07-8P 638208-09-0P  
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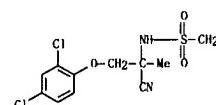
## L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



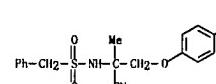
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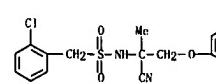
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CN Benzenemethanesulfonamide, N-[1-cyano-2-(2,4-dichlorophenoxy)-1-methylethyl]- (CA INDEX NAME)



RN 638207-96-2 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethylphenoxy)methyl]- (CA INDEX NAME)



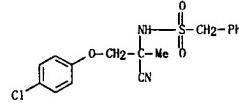
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CN Benzenemethanesulfonamide, 2-chloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



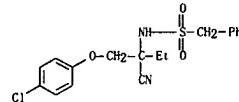
## L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

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638209-03-7P 638209-04-8P 638209-05-9P  
638209-06-0P 638209-07-1P 638209-08-2P  
638209-09-3P 638209-10-6P 638209-11-7P  
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638209-16-2P 638209-17-3P 638209-18-4P  
638209-19-5P 638209-20-8P 638209-25-3P  
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses);  
(prep. of u-sulfonylaminoo-acetonitrile derivs. and their use in preventing or controlling plants infestation by phytopathogenic microorganisms)

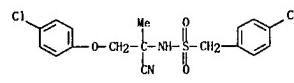
RN 638207-90-6 CAPLUS  
CN Benzenemethanesulfonamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



RN 638207-91-7 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-[(4-chlorophenoxy)methyl]-1-cyanopropyl]- (CA INDEX NAME)



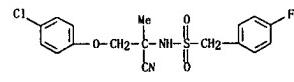
RN 638207-92-8 CAPLUS  
CN Benzenemethanesulfonamide, 4-chloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



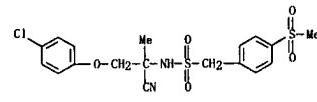
RN 638207-93-9 CAPLUS  
CN Benzenemethanesulfonamide, N-[2-(2-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

## L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

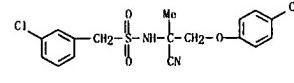
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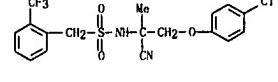
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CN Benzenemethanesulfonamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-4-(methylsulfonyl)- (CA INDEX NAME)



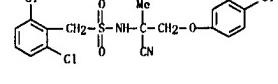
RN 638208-00-1 CAPLUS  
CN Benzenemethanesulfonamide, 3-chloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



RN 638208-01-2 CAPLUS  
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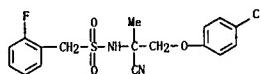


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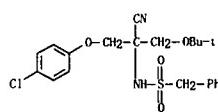


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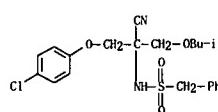
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 RN 638208-03-4 CAPLUS  
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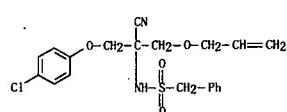
RN 638208-07-8 CAPLUS  
 CN Benzenemethanesulfonamide, N-[2-(4-chlorophenoxy)-1-cyano-1-(1,1-dimethylethoxy)methyl]- (CA INDEX NAME)



RN 638208-09-0 CAPLUS  
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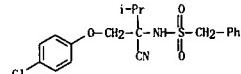


RN 638208-11-4 CAPLUS  
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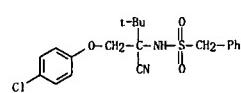


RN 638208-13-6 CAPLUS  
 CN Benzenemethanesulfonamide, N-[2-(4-chlorophenoxy)-1-cyano-1-(methoxymethyl)-] (CA INDEX NAME)

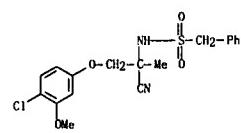
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



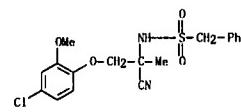
RN 638208-23-8 CAPLUS  
 CN Benzenemethanesulfonamide, N-[1-((4-chlorophenoxy)methyl)-1-cyano-2,2-dimethylpropyl]- (CA INDEX NAME)



RN 638208-25-0 CAPLUS  
 CN Benzenemethanesulfonamide, N-[2-(4-chloro-3-methoxyphenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

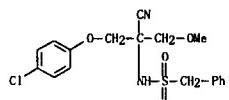


RN 638208-27-2 CAPLUS  
 CN Benzenemethanesulfonamide, N-[2-(4-chloro-2-methoxyphenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

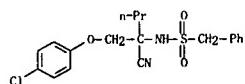


RN 638208-29-4 CAPLUS  
 CN Benzenemethanesulfonamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethoxy)phenoxy]ethyl]- (CA INDEX NAME)

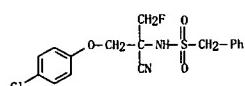
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



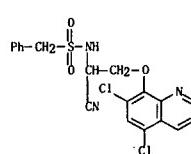
RN 638208-15-8 CAPLUS  
 CN Benzenemethanesulfonamide, N-[1-((4-chlorophenoxy)methyl)-1-cyanobutyl]- (CA INDEX NAME)



RN 638208-17-0 CAPLUS  
 CN Benzenemethanesulfonamide, N-[2-(4-chlorophenoxy)-1-cyano-1-(fluoromethyl)ethyl]- (CA INDEX NAME)

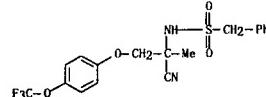


RN 638208-19-2 CAPLUS  
 CN Benzenemethanesulfonamide, N-[1-cyano-2-[(5,7-dichloro-8-quinolinyl)oxy]ethyl]- (CA INDEX NAME)

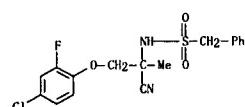


RN 638208-21-6 CAPLUS  
 CN Benzenemethanesulfonamide, N-[1-((4-chlorophenoxy)methyl)-1-cyano-2-methylpropyl]- (CA INDEX NAME)

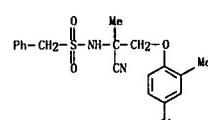
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



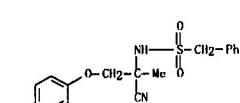
RN 638208-31-8 CAPLUS  
 CN Benzenemethanesulfonamide, N-[2-(4-chloro-2-fluorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



RN 638208-33-0 CAPLUS  
 CN Benzenemethanesulfonamide, N-[2-(4-chloro-2-methylphenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

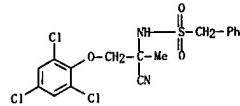


RN 638208-35-2 CAPLUS  
 CN Benzenemethanesulfonamide, N-[1-cyano-2-(4-fluorophenoxy)-1-methylethyl]- (CA INDEX NAME)

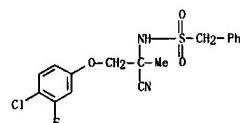


RN 638208-37-4 CAPLUS  
 CN Benzenemethanesulfonamide, N-[1-cyano-1-methyl-2-(2,4,6-trichlorophenoxy)ethyl]- (CA INDEX NAME)

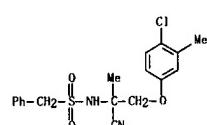
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



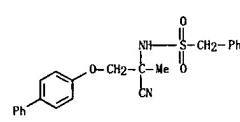
RN 638208-39-6 CAPLUS  
CN Benzenemethanesulfonamide, N-[2-(4-chloro-3-fluorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



RN 638208-41-0 CAPLUS  
CN Benzenemethanesulfonamide, N-[2-(4-chloro-3-methylphenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

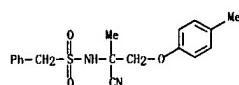


RN 638208-43-2 CAPLUS  
CN Benzenemethanesulfonamide, N-[2-((1,1'-biphenyl)-4-yloxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

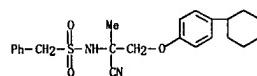


RN 638208-45-4 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-methylethyl-2-(4-methylphenoxy)ethyl]-

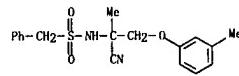
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



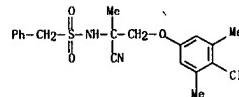
RN 638208-47-6 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-2-(4-cyclohexylphenoxy)-1-methylethyl]- (CA INDEX NAME)



RN 638208-49-8 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-methylethyl-2-(3-methylphenoxy)ethyl]- (CA INDEX NAME)

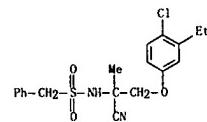


RN 638208-51-2 CAPLUS  
CN Benzenemethanesulfonamide, N-[2-(4-chloro-3,5-dimethylphenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

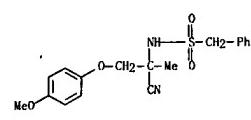


RN 638208-52-3 CAPLUS  
CN Benzenemethanesulfonamide, N-[2-(4-chloro-3-ethylphenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

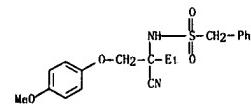
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



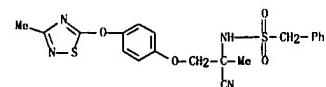
RN 638208-53-4 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-2-(4-methoxyphenoxy)-1-methylethyl]- (CA INDEX NAME)



RN 638208-54-5 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-[(4-methoxyphenoxy)methyl]propyl]- (CA INDEX NAME)

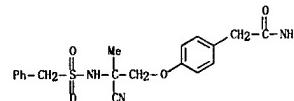


RN 638208-55-6 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-methylethyl-2-[4-(3-methyl-1,2,4-thiadiazolo-5-yl)oxy]phenoxy]- (CA INDEX NAME)

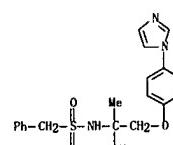


RN 638208-56-7 CAPLUS  
CN Benzenemethanesulfonamide, 4-[2-cyano-2-[(phenylmethyl)sulfonyl]amino]propoxy- (CA INDEX NAME)

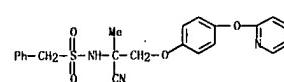
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



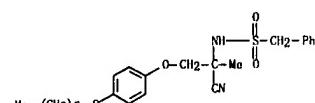
RN 638208-57-8 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-2-[4-(1H-imidazol-1-yl)phenoxy]-1-methylethyl]- (CA INDEX NAME)



RN 638208-58-9 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-methylethyl-2-[4-(2-pyridinyl)phenoxy]ethyl]- (CA INDEX NAME)

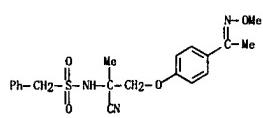


RN 638208-59-0 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-2-[4-(hexyloxy)phenoxy]-1-methylethyl]- (CA INDEX NAME)

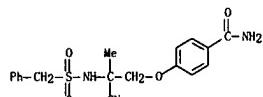


RN 638208-60-3 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-2-[4-[1-(methoxymino)ethyl]phenoxy]-1-methylethyl]- (CA INDEX NAME)

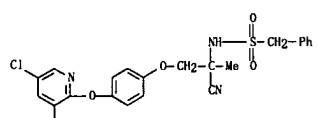
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



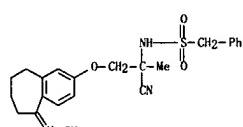
RN 638208-61-4 CAPLUS  
CN Benzonamide, 4-[2-cyano-2-[(phenylmethyl)sulfonyl]amino]propoxy]- (CA INDEX NAME)



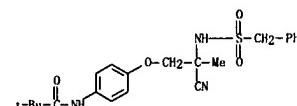
RN 638208-62-5 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-2-{4-[3,5-dichloro-2-pyridinyl]oxy}phenoxy]-1-methylethyl]- (CA INDEX NAME)



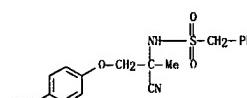
RN 638208-63-6 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-methyl]-2-[6,7,8,9-tetrahydro-5-(methoxyimino)-5H-benzocyclohepten-2-yl]oxyethyl]- (CA INDEX NAME)



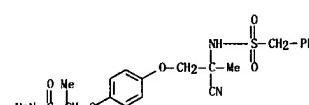
RN 638208-64-7 CAPLUS

L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
CN Propanamide, N-[4-(2-cyano-2-[(phenylmethyl)sulfonyl]amino)propoxy]phenyl]-2,2-dimethyl- (CA INDEX NAME)

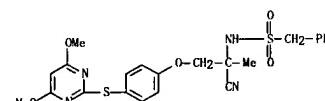
RN 638208-65-8 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-methyl]-2-(4-(methylthio)phenoxy)ethyl]- (CA INDEX NAME)



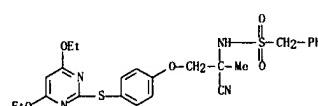
RN 638208-66-9 CAPLUS  
CN Propanamide, 2-[4-(2-cyano-2-[(phenylmethyl)sulfonyl]amino)propoxy]phenox y]- (CA INDEX NAME)



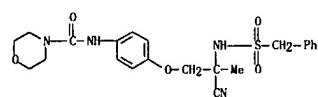
RN 638208-67-0 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-2-[4-(4,6-dimethoxy-2-pyridinyl)thio]phenoxy]-1-methylethyl]- (CA INDEX NAME)



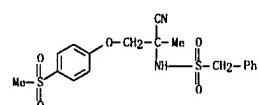
RN 638208-68-1 CAPLUS

L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
CN Benzenemethanesulfonamide, N-[1-cyano-2-[4-(4,6-diethoxy-2-pyridinyl)thio]phenoxy]-1-methylethyl]- (CA INDEX NAME)

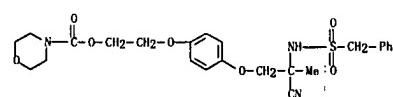
RN 638208-69-2 CAPLUS  
CN 4-Morpholinocarboxamide, N-[4-[2-cyano-2-[(phenylmethyl)sulfonyl]amino]propoxy]phenyl]- (CA INDEX NAME)



RN 638208-70-5 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-methyl]-2-[4-(methylsulfonyl)phenoxy]ethyl]- (CA INDEX NAME)

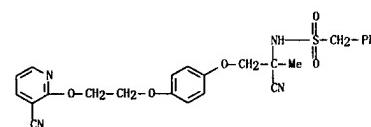


RN 638208-71-6 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[4-[2-cyano-2-[(phenylmethyl)sulfonyl]amino]propoxy]phenyl ester (CA INDEX NAME)

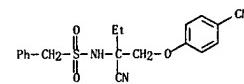


RN 638208-72-7 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-2-[4-[2-(3-cyano-2-pyridinyl)oxy]ethoxy]phenoxy]-1-methylethyl]- (CA INDEX NAME)

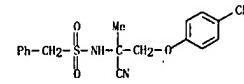
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



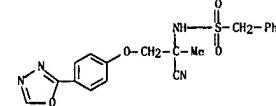
RN 638208-73-8 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-[(4-cyanophenoxy)methyl]propyl]- (CA INDEX NAME)



RN 638208-74-9 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-2-(4-cyanophenoxy)-1-methylethyl]- (CA INDEX NAME)

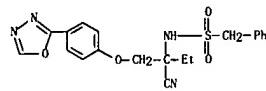


RN 638208-76-1 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-methyl]-2-[4-(1,3,4-oxadiazol-2-yl)phenoxy]ethyl]- (CA INDEX NAME)

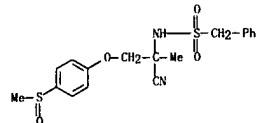


RN 638208-77-2 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-[(4-(1,3,4-oxadiazol-2-yl)phenoxy)methyl]propyl]- (CA INDEX NAME)

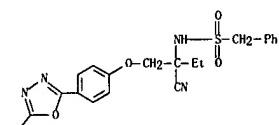
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



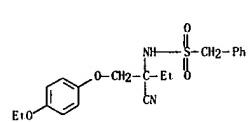
RN 638208-78-3 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-methyl-2-(4-(methylsulfinyl)phenoxy)ethyl]- (CA INDEX NAME)



RN 638208-79-4 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-[(4-(5-ethyl-1,3,4-oxadiazol-2-yl)phenoxy)methyl]propyl]- (CA INDEX NAME)

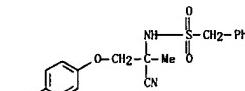


RN 638208-80-7 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-[(4-ethoxyphenoxy)methyl]propyl]- (CA INDEX NAME)

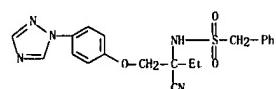


RN 638208-81-8 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-2-(4-ethoxyphenoxy)-1-methylethyl]- (CA INDEX NAME)

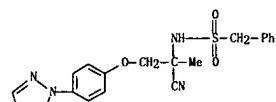
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



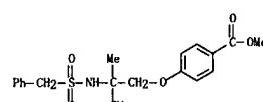
RN 638208-82-9 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-[(4-(1H-1,2,4-triazol-1-yl)phenoxy)methyl]propyl]- (CA INDEX NAME)



RN 638208-83-0 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-methyl-2-(4-(1H-1,2,4-triazol-1-yl)phenoxyethyl]- (CA INDEX NAME)

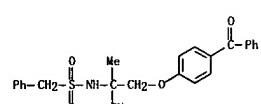


RN 638208-84-1 CAPLUS  
CN Benzoic acid, 4-[2-cyano-2-[(phenylmethyl)sulfonyl]amino]propoxy-methyl ester (CA INDEX NAME)

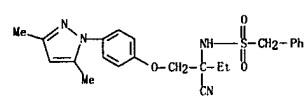


RN 638208-85-2 CAPLUS  
CN Benzenemethanesulfonamide, N-[2-(4-benzoylphenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

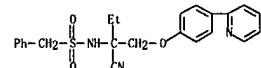
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



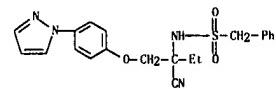
RN 638208-86-3 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-[(4-(3,5-dimethyl-1H-pyrazol-1-yl)phenoxy)methyl]propyl]- (CA INDEX NAME)



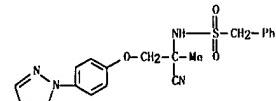
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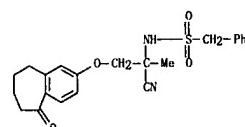


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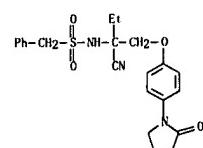


L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

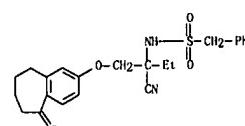
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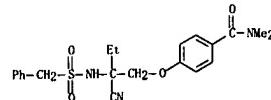


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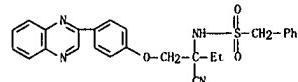


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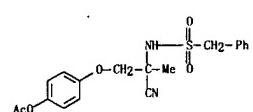
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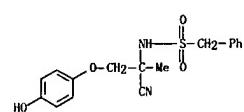
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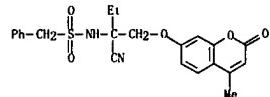


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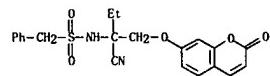


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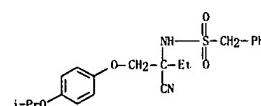
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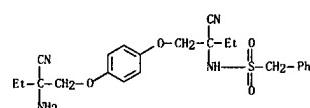
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RN 638209-01-5 CAPLUS  
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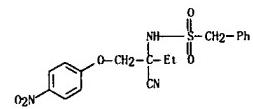


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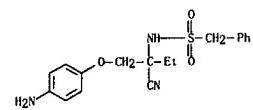


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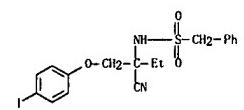
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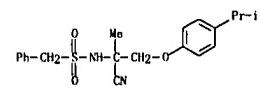
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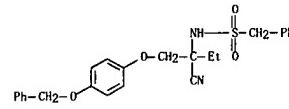


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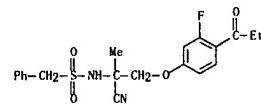


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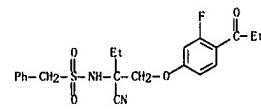
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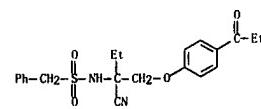
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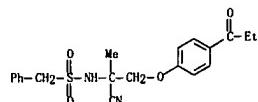


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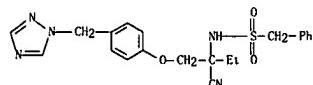


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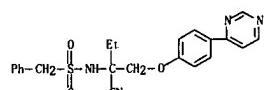
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



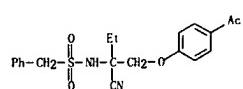
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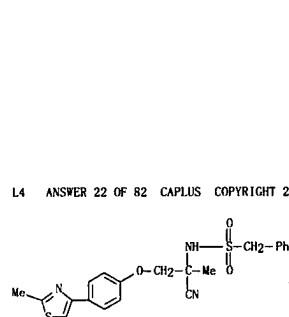
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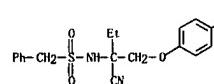
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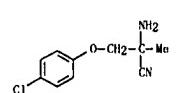


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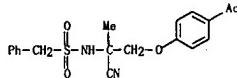
IT 247199-97-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(pereactant; preparation of  $\omega$ -sulfonylamino-acetonitrile derivs. and their use in preventing or controlling plants infestation by phytopathogenic microorganisms)

RN 247199-97-9 CAPLUS  
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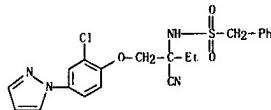


REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

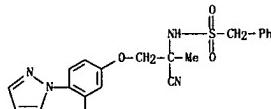
L4 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



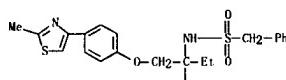
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CN Benzenemethanesulfonamide, N-[1-[[2-chloro-4-(1H-pyrazol-1-yl)phenoxy]methyl]propyl]- (CA INDEX NAME)



RN 638209-18-4 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-2-[3-fluoro-4-(1H-pyrazol-1-yl)phenoxy]-1-methylethyl]- (CA INDEX NAME)



RN 638209-19-5 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-[(4-(2-methyl-4-thiazolyl)phenoxy)methyl]propyl]- (CA INDEX NAME)



RN 638209-20-8 CAPLUS  
CN Benzenemethanesulfonamide, N-[1-cyano-1-methyl-2-[4-(2-methyl-4-thiazolyl)phenoxy]ethyl]- (CA INDEX NAME)

## APPLICANT

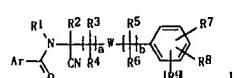
L4 ANSWER 23 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004-2841 CAPLUS  
DOCUMENT NUMBER: I40:59412  
TITLE: Preparation of N-(1-cyano-1-methyl-2-phenoxyethyl)benzamides for controlling parasites  
INVENTOR(S): Ducray, Pierre; Goebel, Thomas  
PATENT ASSIGNEE(S): Novartis A.-G., Switz.: Novartis Pharma G. m. b. H.  
SOURCE: PCT Int. Appl. 54 pp.  
CODEN: PTXHD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004000793	A2	20031231	WO 2003-EP6490	20030618
WO 2004000793	A3	20040219		
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AU 2003279395	A1	20040106	AU 2003-279395	20030618
AU 2003279395	R2	20070510		
EP 1517885	A2	20050330	EP 2003-740290	20030618
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK BR 2003012435	A	20050419	BR 2003-12435	20030618
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NZ 537665	A	20070727	NZ 2003-537665	20030618
IN 2004CN02869	A	20060217	IN 2004-CN2869	20041216
MX 2004PA12971	A	20050516	MX 2004-PA12971	20041217
ZA 2004010232	A	20050623	ZA 2004-10232	20041220
US 2006128801	A1	20060615	US 2005-518210	20051121
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PRIORITY APPLN. INFO.: MARPAT 140:59412

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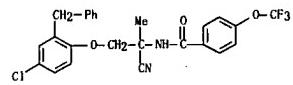


### ABSTRACT:

The title compds. [I]: Ar = (un)substituted (hetero)aryl; R1 = H, alkyl, haloalkyl, alkyloxy; R2-R6 = H, halo, alkyl, alkoxy, etc.; or R2 and R3 = alkylene; R8 = (un)substituted phenylcarbonyl, phenoxy carbonyl, etc., and R7 = H; or R7 and R8 together = (un)substituted alkylene whereby one or two carbon atoms may be replaced by oxygen; R9 = halo, NO2, CN, alkyl, etc.; W = O, S, SO2, NH, N(alkyl); n = 1-4; b = 0-4; n = 0-3] which have advantageous pesticidal properties, and are especially suitable for controlling parasites on

L4 ANSWER 23 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 warm-blooded animals, were prepnd. E.g., a 3-step synthesis of N-(1-cyano-1-methyl-2-(2-benzyl)-4-chlorophenoxyethyl)-4-(trifluoromethoxybenzamide (starting from 2-benzyl-4-chlorophenol and chloroacetone). The compds. I were tested in various biol. tests (no data). For example, in vivo test on *T. colubriformis* and *H. Contortus* on Mongolian gerbils using peroral application showed a vast redn. in nematode infestation (no specific data was given).

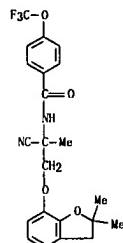
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 639476-86-1P  
 RL: AGC (Agricultural use); BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of N-(1-cyano-1-methyl-2-phenoxyethyl) benzamides for controlling parasites)  
 RN 639476-83-8 CAPLUS  
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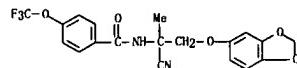
RN 639476-84-9 CAPLUS  
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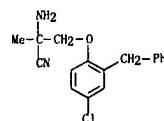
L4 ANSWER 23 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 639476-86-1 CAPLUS  
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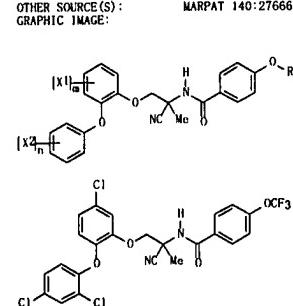


IT 639476-88-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of N-(1-cyano-1-methyl-2-phenoxyethyl) benzamides for controlling parasites)  
 RN 639476-88-3 CAPLUS  
 CN Propiannitrile, 2-amino-3-[4-chloro-2-(phenylmethyl)phenoxy]-2-methyl- (CA INDEX NAME)



L4 ANSWER 24 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 DOCUMENT NUMBER: 2003-991474 CAPLUS  
 DOCUMENT NUMBER: 140:27666  
 TITLE: Preparation of amidoacetonitrile compounds as pesticides  
 INVENTOR(S): Ducray, Pierre; Goebel, Thomas; Bouvier, Jacques  
 PATENT ASSIGNEE(S): Novartis A. G., Switz.; Novartis Pharma G. M. B. H.  
 SOURCE: PCT Int. Appl. 41 pp.  
 CODEN: PIIXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003104187	A1	20031218	WO 2003-EP5928	20030605
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RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
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BR 2003011607	A	20050222	BR 2003-11607	20030605
EP 1513799	A1	20050516	EP 2003-757034	20030605
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JP 2005528458	I	20050922	JP 2004-511257	20030605
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US 2005203178	A1	20050915	US 2004-514300	20041112
US 7304018	B2	20071204		
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MX 2004PA12224	A	20050225	MX 2004-PA12224	20041206
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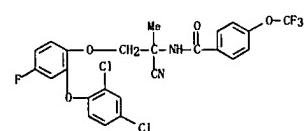


L4 ANSWER 24 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

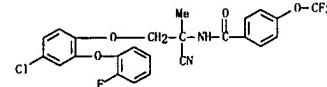
ABSTRACT:  
 The title compds. [I: R = alkyl, haloalkyl, alkoxyalkyl, haloalkoxyhaloalkyl; XI, X2 = halo; m = 1-4; n = 1-5] which have advantageous pesticidal properties and are especially suitable for controlling parasites on warm-blooded animals, were prepared and formulated. E.g., a 3-step synthesis of I (starting from 5-chloro-2-(2,4-dichlorophenoxy)phenol and chloroacetone) was given. The compds. I were tested in vivo on *Trichuris longulus colubriformis* and *Haemonchus contortus* on Mongolian gerbils. In this test, a vast reduction in nematode infestation is achieved with compds. I (in particular, one of the compds. I effects complete elimination of the nematode infestation at 16 mg/kg).

IT 633305-14-3P 633305-16-5P 633305-17-6P  
 633305-18-7P 633305-19-8P 633305-20-1P  
 633305-22-3P 633305-23-4P 633305-24-5P  
 633305-25-6P 633305-26-7P 633305-27-8P  
 633305-28-9P  
 RL: AGC (Agricultural use); BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of amidoacetonitrile compds. as pesticides)

RN 633305-14-3 CAPLUS  
 CN Benzamide, N-[2-[4-chloro-2-[{2,4-dichlorophenoxy}-4-fluorophenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)

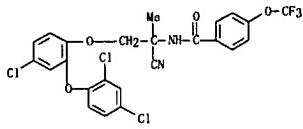


RN 633305-16-5 CAPLUS  
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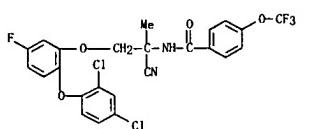


RN 633305-17-6 CAPLUS  
 CN Benzamide, N-[2-[4-chloro-2-(2,4-dichlorophenoxy)phenoxy]-1-cyano-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)

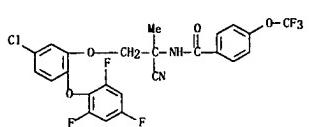
L4 ANSWER 24 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



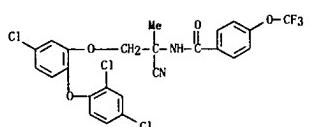
RN 633305-18-7 CAPLUS  
CN Benzamide, N-[1-cyano-2-[2-(2,4-dichlorophenoxy)-5-fluorophenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



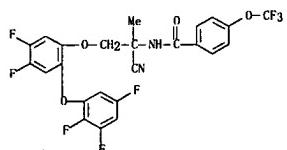
RN 633305-19-8 CAPLUS  
CN Benzamide, N-[2-[5-chloro-2-(2,4,6-trifluorophenoxy)phenoxy]-1-cyano-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



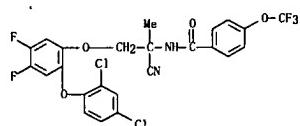
RN 633305-20-1 CAPLUS  
CN Benzamide, N-[2-[5-chloro-2-(2,4-dichlorophenoxy)phenoxy]-1-cyano-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



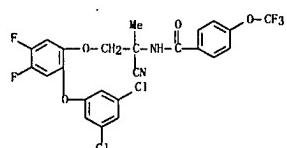
L4 ANSWER 24 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



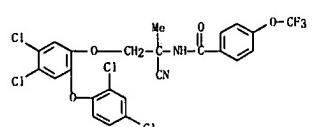
RN 633305-26-7 CAPLUS  
CN Benzamide, N-[1-cyano-2-[2-(2,4-dichlorophenoxy)-4,5-difluorophenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



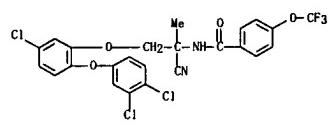
RN 633305-27-8 CAPLUS  
CN Benzamide, N-[1-cyano-2-[2-(3,5-dichlorophenoxy)-4,5-difluorophenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



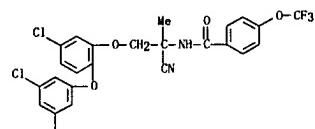
RN 633305-28-9 CAPLUS  
CN Benzamide, N-[1-cyano-2-[4,5-dichloro-2-(2,4-dichlorophenoxy)phenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



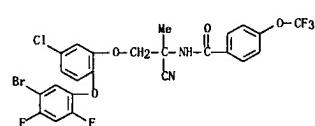
L4 ANSWER 24 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
RN 633305-22-3 CAPLUS  
CN Benzamide, N-[2-[5-chloro-2-(3,4-dichlorophenoxy)phenoxy]-1-cyano-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



RN 633305-23-4 CAPLUS  
CN Benzamide, N-[2-[5-chloro-2-(3,5-dichlorophenoxy)phenoxy]-1-cyano-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)

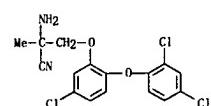


RN 633305-24-5 CAPLUS  
CN Benzamide, N-[2-[2-(5-bromo-2,4-difluorophenoxy)-5-chlorophenoxy]-1-cyano-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



RN 633305-25-6 CAPLUS  
CN Benzamide, N-[1-cyano-2-[4,5-difluoro-2-(2,3,5-trifluorophenoxy)phenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)

L4 ANSWER 24 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
IT 633305-30-3P, 2-Amino-3-(5-chloro-2-(2,4-dichlorophenoxy)phenoxy)-2-methylpropionitrile  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation): RACT (Reactant or reagent)  
(preparation of amidoacetonitrile compds. as pesticides)  
RN 633305-30-3 CAPLUS  
CN Propanenitrile, 2-amino-3-[5-chloro-2-(2,4-dichlorophenoxy)phenoxy]-2-methyl- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

## L4 ANSWER 25 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003-931318 CAPLUS

DOCUMENT NUMBER: 140:4857

TITLE: Preparation of substituted benzamides for controlling parasites

INVENTOR(S): Ducray, Pierre; Goebel, Thomas; Bouvier, Jacques;

Durano, Corinne

PATENT ASSIGNEE(S): Novartis Ag, Switz.: Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

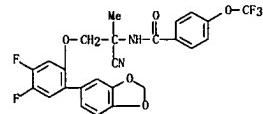
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003097585	A2	20031127	CA 2003-2486465	20030521
WO 2003097585	A3	20041209	WO 2003-EP5331	20030521
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW				
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GR, GU, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
CA 2486465	A1	20031127	CA 2003-2486465	20030521
AU 2003269601	A1	20031202	AU 2003-269601	20030521
BR 2003011192	A	20050222	BR 2003-11192	20030521
EP 1509494	A2	20050302	EP 2003-740142	20030521
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1656061	A	20050817	CN 2003-811463	20030521
JP 2005526136	T	20050902	JP 2004-505318	20030521
ZA 2004098738	A	20051031	ZA 2004-211532	20041028
WU 2004CN01532	A	20040914	MX 2004-711532	20041119
IN 2004CN02619	A	20070921	IN 2004-CN2619	20041122
US 2005203148	A1	20050915	US 2005-514904	20050105
US 7148255	B2	20061212		
PRIORITY APPLN. INFO. :		CH 2002-856	A 20020522	
OTHER SOURCE(S):	MARPAT 140:4857	WO 2003-EP5331	W 20030521	

GRAPHIC IMAGE:

## L4 ANSWER 25 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

(Continued)



## L4 ANSWER 26 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003-931161 CAPLUS

DOCUMENT NUMBER: 140:4955

TITLE: Preparation of N-acylaminoacetonitriles for controlling parasites

INVENTOR(S): Ducray, Pierre; Goebel, Thomas; Bouvier, Jacques;

Durano, Corinne

PATENT ASSIGNEE(S): Novartis Ag, Switz.: Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

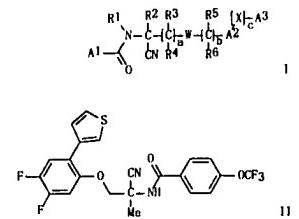
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003097036	A1	20031127	WO 2003-EP5334	20030521
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW				
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
CA 2483286	A1	20031127	CA 2003-2483286	20030521
AU 2003242555	A1	20031202	AU 2003-242555	20030521
BR 2003011214	A	20050301	BR 2003-11214	20030521
EP 1509221	A1	20050302	EP 2003-752774	20030521
R: AT, BE, CH, DE, DK, ES, FR, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1649579	A	20050803	CN 2003-809965	20030521
JP 2005536466	T	20051202	JP 2004-505035	20030521
NZ 536184	A	20061027	NZ 2003-536184	20030521
ZA 2004007974	A	20060726	ZA 2004-7974	20041004
US 2005182127	A1	20050818	US 2004-513806	20041108
MX 2004PA11531	A	20050214	MX 2004-PA11531	20041119
IN 2004CN02610	A	20070921	IN 2004-CN2610	20041122
PRIORITY APPLN. INFO. :		CH 2002-856	A 20020522	
OTHER SOURCE(S):	MARPAT 140:4955	WO 2003-EP5334	W 20030521	

GRAPHIC IMAGE:



## L4 ANSWER 26 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

## ABSTRACT:

The title compds. [1; A1, A2 = (un)substituted aryl, heteroaryl, etc.; A3 = (un)substituted pyrimidyl, s-triazinyl, 1,2,4-triazinyl, etc.; R1 = H, alkyl, haloalkyl, allyl, alkoxyethyl; R2-R6 = H, halo, alkyl, etc.; or R2 and R3 are jointly alkylene; W = O, S, SO2, NR7; X = O, S, NR7; R7 = H, alkyl; a = 1-4; b = 0-4; c = 0-1] which have advantageous pesticidal properties, and are particularly suitable for controlling parasites in warm-blooded animals, were prepared and formulated. E.g., a multi-step synthesis of the benzamide [1], starting from chloroacetone and 2-bromo-4,5-difluorophenol, was given.

IT 627881-34-8P 627881-35-OP 627881-36-1P

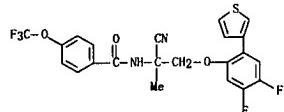
627881-37-2P 627881-38-3P 627881-39-4P

RL: AGC (Agricultural use); BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-acylaminonitriles for controlling parasites)

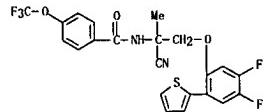
RN 627881-34-9 CAPLUS

CN Benzamide, N-[1-cyano-2-[4,5-difluoro-2-(3-thienyl)phenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



RN 627881-35-0 CAPLUS

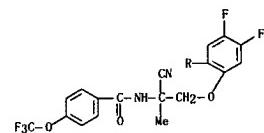
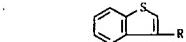
CN Benzamide, N-[1-cyano-2-[4,5-difluoro-2-(2-thienyl)phenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



RN 627881-36-1 CAPLUS

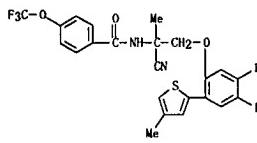
CN Benzamide, N-[1-cyano-2-[4,5-difluoro-2-(4-methyl-2-thienyl)phenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)

## L4 ANSWER 26 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



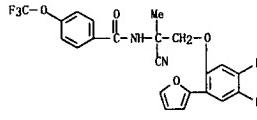
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

## L4 ANSWER 26 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



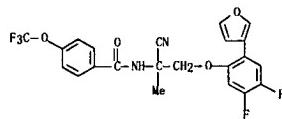
RN 627881-37-2 CAPLUS

CN Benzamide, N-[1-cyano-2-[4,5-difluoro-2-(2-furanyl)phenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



RN 627881-38-3 CAPLUS

CN Benzamide, N-[1-cyano-2-[4,5-difluoro-2-(3-furanyl)phenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



RN 627881-39-4 CAPLUS

CN Benzamide, N-[2-(2-benzo[b]thien-3-yl)-4,5-difluorophenoxy]-1-cyano-1-methylethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)

## L4 ANSWER 27 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:841853 CAPLUS

DOCUMENT NUMBER: 140:87061

TITLE: N-Arylamidonitriles as bioavailable peptidomimetic inhibitors of cathepsin B  
AUTHOR(S): Greenspan, Paul D.; Clark, Kirk L.; Cowen, Scott D.; McQuire, Leslie J.; Rossi, Rubin A.; Farley, David M.; Quigros, Elizabeth; Coppa, David E.; Du, Zengning; Fang, Zhou; Zhou, Huanghai; Doughty, John; Toscano, Karen T.; Wigg, Andrew M.; Zhou, Siyan  
CORPORATE SOURCE: Novartis Institute of Biomedical Research, East Hanover, NJ, 07936, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2003), 13(22), 4121-4124

CODEN: BMCLB; ISSN: 0960-894X

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 140:87061

ABSTRACT: To improve the pharmacokinetics of a previously reported series of dipeptidyl nitrile cathepsin B inhibitors, the P2-P3 amide group was replaced with an arylamine. Further optimization of this template resulted in highly potent and selective inhibitors with excellent oral availability.

IT 374118-06-6P 374118-08-8P 374118-11-3P

374118-13-5P 374118-16-8P 374118-45-3P

374118-46-4P 374118-49-7P 374118-61-3P

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374118-82-8P 645394-51-0P

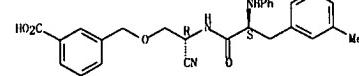
RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and structure-activity relationship of N-arylamidonitriles as bioavailable peptidomimetic inhibitors of cathepsin B)

RN 374118-06-6 CAPLUS

CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-1-oxo-3-phenyl-2-(phenylamino)propyl]amino]ethoxy]methyl]- (CA INDEX NAME)

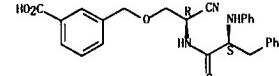
Absolute stereochemistry.



RN 374118-08-B CAPLUS

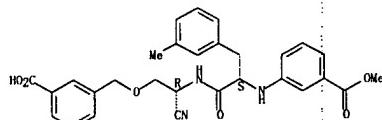
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-1-oxo-3-phenyl-2-(phenylamino)propyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



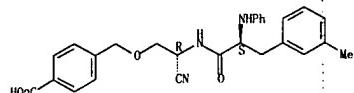
L4 ANSWER 27 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 RN 374118-11-3 CAPLUS  
 CN Benzoic acid, 3-[(1S)-2-[(1R)-2-[(3-carboxyphenyl)methoxy]-1-cyanoethyl]amino]-3-(3-methylphenyl)methyl]-2-oxoethyl]amino]-, 1-methyl ester (CA INDEX NAME)

Absolute stereochemistry.



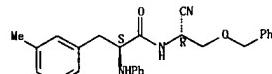
RN 374118-13-5 CAPLUS  
 CN Benzoic acid, 4-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-16-8 CAPLUS  
 CN Benzenepropanamide, N-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]-3-methyl-a-(phenylamino)-, (aS)- (CA INDEX NAME)

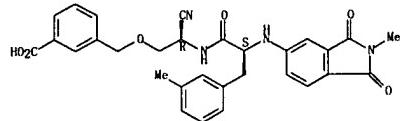
Absolute stereochemistry.



RN 374118-45-3 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2,3-dihydro-2-methyl-1,3-dioxo-1H-isindol-5-yl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

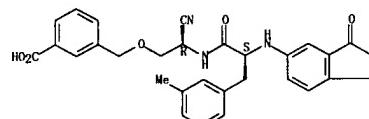
Absolute stereochemistry.

L4 ANSWER 27 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



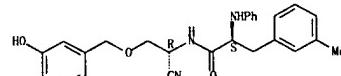
RN 374118-46-4 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2,3-dihydro-3-oxo-1H-inden-5-yl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-49-7 CAPLUS  
 CN Benzenepropanamide, N-[(1R)-1-cyano-2-(3-hydroxyphenyl)methoxy]ethyl]-3-methyl-a-(phenylamino)-, (aS)- (CA INDEX NAME)

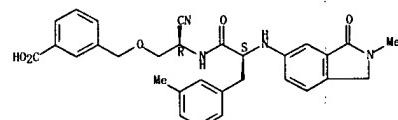
Absolute stereochemistry.



RN 374118-61-3 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2,3-dihydro-2-methyl-3-oxo-1H-isindol-5-yl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

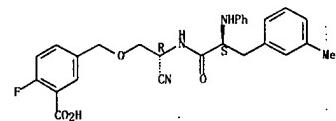
Absolute stereochemistry.

L4 ANSWER 27 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



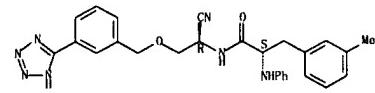
RN 374118-69-1 CAPLUS  
 CN Benzoic acid, 5-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy]methyl]-2-fluoro- (CA INDEX NAME)

Absolute stereochemistry.



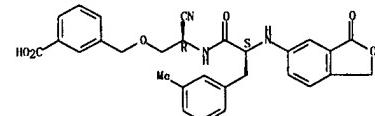
RN 374118-72-6 CAPLUS  
 CN Benzenepropanamide, N-[(1R)-1-cyano-2-[(3-(1H-tetrazol-5-yl)phenyl)methoxy]ethyl]-3-methyl-a-(phenylamino)-, (aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-73-7 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(1,3-dihydro-3-oxo-5-isobenzofuranyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

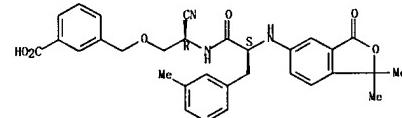
Absolute stereochemistry.



L4 ANSWER 27 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

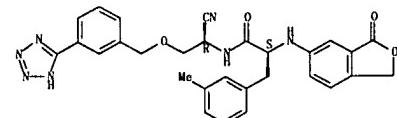
RN 374118-74-8 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(1,3-dihydro-1,1-dimethyl-3-oxo-1H-isindol-5-yl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



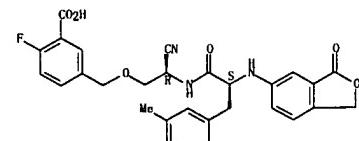
RN 374118-75-9 CAPLUS  
 CN Benzenepropanamide, N-[(1R)-1-cyano-2-[(3-(1H-tetrazol-5-yl)phenyl)methoxy]ethyl]-a-[1,3-dihydro-3-oxo-5-isobenzofuranyl]amino]-3-methyl-, (aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



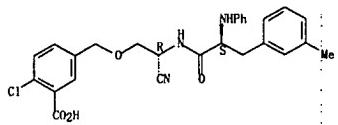
RN 374118-76-0 CAPLUS  
 CN Benzoic acid, 5-[(2R)-2-cyano-2-[(2S)-2-[(1,3-dihydro-3-oxo-5-isobenzofuranyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]-2-fluoro- (CA INDEX NAME)

Absolute stereochemistry.



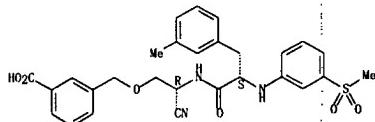
RN 374118-82-8 CAPLUS  
 CN Benzoic acid, 2-chloro-5-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy]methyl]- (CA INDEX NAME)

L4 ANSWER 27 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
Absolute stereochemistry.



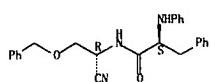
RN 645394-51-0 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-2-[(3-methylsulfonyl)phenyl]amino]-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

### Absolute stereochemistry.



IT 645394-49-6DP, derivs.  
 RL: SPN (Synthetic preparation): PREP (Preparation)  
 (preparation and structure-activity relationship of N-arylamino nitriles as  
 bioavailable peptidomimetic inhibitors of cathepsin B)  
 RN 645394-49-6 CAPLUS  
 CN Benzenepropionamide, N-[{(1R)-1-cyano-2-(phenylmethoxy)ethyl]-a-  
 (hexylamino)-, (S)- (CA INDEX NAME)

### Absolute stereochemistry



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

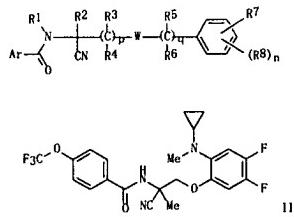
L4 ANSWER 28 OF 82 CAPLUS COPYRIGHT 2004 ACS ON STN  
ACCESSION NUMBER: 2003-570944 CAPLUS  
DOCUMENT NUMBER: I39:133350  
TITLE: Aminodectonitrile derivatives useful as parasiticides, and their preparation, compositions, and use  
INVENTOR(S): Ducray, Pierre; Goebel, Thomas; Fruechtel, Joerg; Bouvier, Jacques; Flum, Gabriela  
PATENT ASSIGNEE(S): Novartis Ag. Switz.; Novartis Pharma Gmbh  
SOURCE: PCT Int. Appl., 50 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003059868 W: AE, AL, AR, AT, AU, AZ, BA, BB, BG, BR, BY, CZ, DE, DK, DZ, EE, ES, FI, GB, GE, GH, CO, CR, CU, CZ, DE, DK, DM, EK, ES, FI, GB, GE, GH, HR, HU, IL, IN, IS, JP, KE, KG, KP, KR, LZ, LC, LT, LV, MA, MD, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW	A1	20030724	WO 2003-EP498	20030120
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, TR, AT, BE, BG, CH, CY, CZ, DE, DK, ES, FI, FR, GR, GR, HU, IE, LU, MC, NL, PT, SI, SK, TR				
CA 2468423 AU 2003202580 EP 1470103	A1	20030724	CA 2003-2468423	20030120
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, HU, HU	A1	20030730	AU 2003-202580	20030120
BR 2003070011 CN 1592296 JP 200314453	A	20040127	EP 2003-701513	20030120
IN 1592296 NZ 533964 ZA 2004003851	A	20041103	CA 2003-1592296	20030120
US 2005051736	A1	20050509	CA 2003-559979	20030120
US 7153814	B2	200506224	NZ 2003-533964	20030120
IN 2004CN1580	A	20050810	ZA 2004-3851	20040519
MX 2004PA7048	A	20050817	US 2004-501495	20040714
PRIORITY APPLN. INFO. :		200601226	IN 2004-CN1580	20040716
		200602224	MX 2004-PA7048	20040721
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			WO 2003-EP498	W 20030120

OTHER SOURCE(S) : MARPAT 139:133350  
GRAPHIC IMAGE:

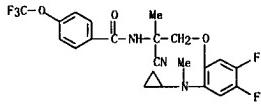
**GRAPHIC IMAGE:**

L4 ANSWER 28 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

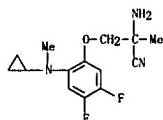


IT 565470-08-8P, N-[2-Cyano-1-[2-(N-cyclopropyl)-N-methylamino]-4,5-difluorophenoxy]prop-2-yl]-4-(trifluoromethoxy)benzamide  
 RL: AGR (Agricultural use); PAC (Pharmacological activity); SPN (Synthetic preparation); THI (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (parasiticide; preparation of aromatic amidecononitrile derivs. as parasiticides)  
 RN 565470-08-2 CAPLUS  
 CN Benzonamide, N-[1-cyano-2-[2-(cyclopropylmethylamino)-4,5-difluorophenoxy]-1-

14 ANSWER 28 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
methylmethoxy)-4-(trifluoromethoxy)- (CA INDEX NAME)



IT 565470-16-8P. 2-Amino-2-[2-(N-cyclopropyl)-N-methylamino]-4,5-difluorophenoxy(methyl)propiophenonitrile  
 RL: RCT (Reactant); SPN: Synthetic preparation; PREP (Preparation): RACT (Reactant or reagent)  
 (preparation of aromatic amidoacetonitrile derivs. as parasiticides)  
 RN 565470-16-8 CAPLUS  
 CN Propanenitrile, 2-amino-3-[2-(cyclopropylmethylamino)-4,5-difluorophenoxy, 2-methyl - (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT.

L4 ANSWER 29 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003-282525 CAPLUS

DOCUMENT NUMBER: 138-287457

TITLE: Preparation of peptide nitriles useful as reversible

inhibitors of cysteine proteases

INVENTOR(S): Bekkali, Younes; Hickey, Eugene R.; Liu, Weinan;

Patel, Usha R.; Spero, Denice Mary; Sun, Sanxing;

Thomson, David S.; Ward, Yancey D.; Young, Erick R. R.

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl. 291 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

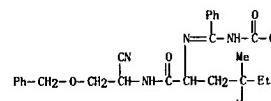
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003029200	A2	20030410	W0 2002-US30644	20020927
WO 2003029200	A3	20031113		
W: AE, AG, AL, AR, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GR, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VU, YU, ZA, ZH, ZW				
RW: GH, GM, KE, LS, MT, MZ, SD, SL, SZ, TZ, UC, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TZ, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GG, GW, ML, MR, NE, SN, TD, TG				
CA 2459825	A1	20030410	CA 2002-2459825	20020927
AU 2002340031	A1	20030414	AU 2002-340031	20020927
US 2004063679	A1	20040401	US 2002-256512	20020927
US 6936606	B2	20050830		
EP 1434769	A2	20040707	EP 2002-778364	20020927
R: AI, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BC, CZ, EE, SK				
JP 2005504827	T	20050217	JP 2003-532454	20020927
PRORITY APPLN. INFO.: US: 2001-326538P			US: 2001-326538P	P 20011002
			WO 2001-US30644	W 20020927

OTHER SOURCE(S): MARPAT 138:287981

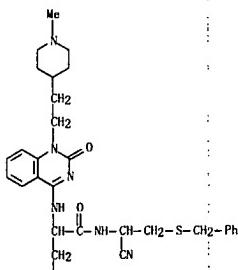
ABSTRACT:  
RN: CR1NR4CR2R3C(:X)NR4CR5R9CN or RGR8NCR1:NCR2R3C(:X)NR4CR5R9CN [R1 is a bond, H, (un)substituted alkyl, alkoxy, aryloxy, cycloalkyl, cycloalkyloxy, aryl, benzyl, tetrahydronaphthyl, indenyl, indanyl, alkylsulfonylalkyl, cycloalkylsulfonylalkyl, arylsulfonylalkyl, heterocycl or heterocyclyoxy; R2 is H or alkyl; R3 is a bond, H, (un)substituted (hetero)alkyl, alkyne, heterocycl or heterocyclic ring; R4 is H, OH or alkyl; R5 is H, alkyl, alkoxy, alkoxyalkyl or arylalkyl; R6 is H, OH, CH or (un)substituted; or R1 and R6 form a ring; R7 is H, (un)substituted (hetero)alkyl, R9 is H, (un)substituted (hetero)alkyl, heteroaroyl or cyano; CR3R9 is a ring; were prepared as novel cathepsin S, K, F, L and B reversible inhibitors for treating autoimmune and other diseases. The [(1R)-1-(4-methoxyphenyl)-3,3-dimethylbutyl]methylmorpholin-4-ylmethylethanesulfonic acid 1-propylpiperidin-4-yl ester was prepared by a multistep procedure including amidation reactions. Comprds. of the invention showed IC50 values < 100 micromolar for inhibition of cathepsins S, K, F, L and B.
IT 507264-87-IP 507264-98-4P 507264-99-5P  
507265-00-1P 507265-40-9P 507265-43-2P

L4 ANSWER 29 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

(Continued)

RN 507265-40-9 CAPLUS  
CN Cyclohexanepropanamide, N-[1-cyano-2-[(phenylmethyl)thio]ethyl]-α-[(1,2-dihydro-1-(2-(1-methyl-4-piperidinyl)ethyl)-2-oxo-4-quinazolinyl]amino]-4,4-dimethyl- (CA INDEX NAME)

PAGE 1-A



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RN 507265-43-2 CAPLUS  
CN Cyclohexanepropanamide, N-[1-cyano-2-(phenylmethoxy)ethyl]-α-[(1,2-dihydro-1-[2-(4-methyl-1-piperazinyl)ethyl]-2-oxo-4-quinazolinyl]amino]- (CA INDEX NAME)

L4 ANSWER 29 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

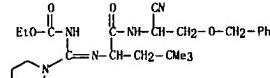
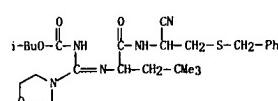
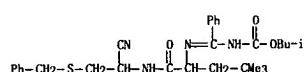
507265-54-5P 507265-61-4P 507265-62-5P

507265-63-6P 507265-64-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

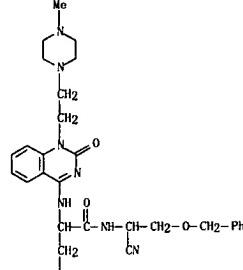
(prepn. of peptide nitriles useful as reversible inhibitors of cysteine

proteases)

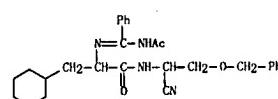
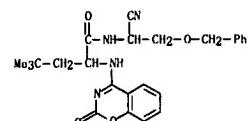
RN 507264-87-1 CAPLUS  
CN 10-0xa-2,4,7-triazaundec-2-enoic acid, 8-cyano-5-(2,2-dimethylpropyl)-3-(4-morpholinyl)-6-oxo-11-phenyl-, ethyl ester (9CI) (CA INDEX NAME)RN 507264-98-4 CAPLUS  
CN 10-Thia-2,4,7-triazaundec-2-enoic acid, 8-cyano-5-(2,2-dimethylpropyl)-3-(4-morpholinyl)-6-oxo-11-phenyl-, 2-methylpropyl ester (9CI) (CA INDEX NAME)RN 507264-99-5 CAPLUS  
CN 10-Thia-2,4,7-triazaundec-2-enoic acid, 8-cyano-5-(2,2-dimethylpropyl)-6-oxo-3,11-diphenyl-, 2-methylpropyl ester (9CI) (CA INDEX NAME)RN 507265-00-1 CAPLUS  
CN 10-0xa-2,4,7-triazaundec-2-enoic acid, 8-cyano-5-(2,2-dimethylbutyl)-6-oxo-3,11-diphenyl-, 2-methylpropyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 29 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-A

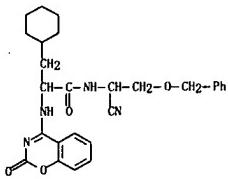


PAGE 2-A

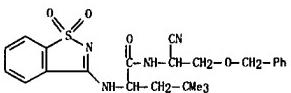
RN 507265-54-5 CAPLUS  
CN Cyclohexanepropanamide, α-[(acetylamo)phenylmethyl]ciano-N-[1-cyano-2-(phenylmethoxy)ethyl]- (CA INDEX NAME)RN 507265-61-4 CAPLUS  
CN Pentanamide, N-[1-cyano-2-(phenylmethoxy)ethyl]-4,4-dimethyl-2-[2-oxo-1,3-benzoxazin-4-yl]amino]- (CA INDEX NAME)

## L4 ANSWER 29 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

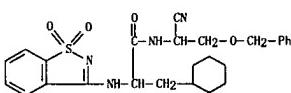
RN 507265-62-5 CAPLUS  
 CN Cyclohexanepropanamide, N-[1-cyano-2-(phenylmethoxy)ethyl]-α-[ (2-oxo-2H-1,3-benzoxazin-4-yl)amino]- (CA INDEX NAME)



RN 507265-63-6 CAPLUS  
 CN Pentanamide, N-[1-cyano-2-(phenylmethoxy)ethyl]-2-[ (1,1-dioxido-1,2-benzisothiazol-3-yl)amino]-4,4-dimethyl- (CA INDEX NAME)

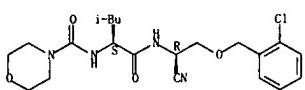


RN 507265-64-7 CAPLUS  
 CN Cyclohexanepropanamide, N-[1-cyano-2-(phenylmethoxy)ethyl]-α-[ (1,1-dioxido-1,2-benzisothiazol-3-yl)amino]- (CA INDEX NAME)

L4 ANSWER 30 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 Absolute stereochemistry.

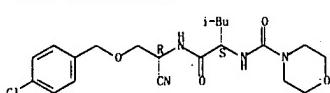
RN 290816-82-9 CAPLUS  
 CN 4-Morpholinocarboxamide, N-[ (IS)-1-[[ (IR)-2-[(2-chlorophenyl)methoxy]-1-cyanoethyl]amino]carbonyl]-3-methylbutyl- (CA INDEX NAME)

Absolute stereochemistry.



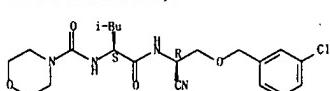
RN 290816-83-0 CAPLUS  
 CN 4-Morpholinocarboxamide, N-[ (IS)-1-[[ (IR)-2-[(4-chlorophenyl)methoxy]-1-cyanoethyl]amino]carbonyl]-3-methylbutyl- (CA INDEX NAME)

Absolute stereochemistry.



RN 290816-89-6 CAPLUS  
 CN 4-Morpholinocarboxamide, N-[ (IS)-1-[[ (IR)-2-[(3-chlorophenyl)methoxy]-1-cyanoethyl]amino]carbonyl]-3-methylbutyl- (CA INDEX NAME)

Absolute stereochemistry.



RN 290816-91-0 CAPLUS  
 CN 4-Morpholinocarboxamide, N-[ (IS)-1-[[ (IR)-1-cyano-2-[(2-methylphenyl)methoxy]ethyl]amino]carbonyl]-3-methylbutyl- (CA INDEX NAME)

Absolute stereochemistry.

## L4 ANSWER 30 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:55370 CAPLUS  
 DOCUMENT NUMBER: 140:5280  
 TITLE: Design and synthesis of dipeptide nitriles as reversible and potent Cathepsin S inhibitors. [Erratum to document cited in CA138:56234]

AUTHOR(S): Ward, Yancey D.; Thomson, David S.; Frye, Leah L.; Cywin, Charles L.; Morwick, Tina; Emmanuel, Michel J.; Zindell, Ronnee; McNeil, Daniel; Bekkali, Younes; Girardot, Marc; Hrapchak, Maiti; Defuri, Molly; Crane, Kathy; White, Delta; Pav, Susan; Wang, Yong; Hao, Ning-Hong; Grigson, Christine A.; Labuda, Mark E.; Freeman, Dorothy M.; Davidson, Walter; Hopkins, Jerry P.; Brown, Marianne L.; Spero, Denise M.

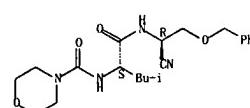
CORPORATE SOURCE: Boehringer Ingelheim Pharmaceuticals, Ridgefield, CT, 06877-0368, USA  
 SOURCE: Journal of Medicinal Chemistry (2003), 46(5), 882  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

ABSTRACT:  
 The name of author Marc Girardot was incorrect in the version published on the Web 10/31/2002 (ASAP) and in the Dec. 5, 2002 issue (Volume 45, Number 25, pp 5471-5482). The correct electronic version of the manuscript was published on 01/20/2003.

IT 290816-77-2P  
 RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); (Biological study); PRCP (Preparation)  
 (preparation and biol. activity of dipeptide nitriles as reversible and potent cathepsin S inhibitors (Erratum))

RN 290816-77-2 CAPLUS  
 CN 4-Morpholinocarboxamide, N-[ (IS)-1-[[ (IR)-1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-methylbutyl- (CA INDEX NAME)

Absolute stereochemistry.

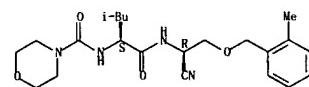


IT 290816-78-3P 290816-82-9P 290816-83-0P  
 290816-89-6P 290816-91-0P 290817-02-6P  
 479091-65-1P 479091-66-2P 479091-67-3P  
 479091-70-8P 479091-71-9P 479091-72-0P  
 479091-73-1P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and biol. activity of dipeptide nitriles as reversible and potent cathepsin S inhibitors (Erratum))

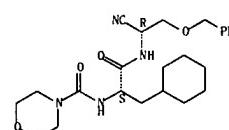
RN 290816-78-3 CAPLUS  
 CN 4-Morpholinocarboxamide, N-[ (IS)-1-[[ (IR)-1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-dimethylbutyl- (CA INDEX NAME)

## L4 ANSWER 30 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



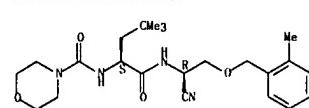
RN 290817-02-6 CAPLUS  
 CN 4-Morpholinocarboxamide, N-[ (IS)-2-[( (IR)-1-cyano-2-(phenylmethoxy)ethyl)amino]-1-(cyclohexylmethyl)-2-oxoethyl]- (CA INDEX NAME)

Absolute stereochemistry.



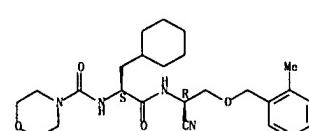
RN 479091-65-1 CAPLUS  
 CN 4-Morpholinocarboxamide, N-[ (IS)-1-[[ (IR)-1-cyano-2-(2-methylphenyl)methoxy]ethyl]amino]carbonyl]-3,3-dimethylbutyl- (CA INDEX NAME)

Absolute stereochemistry.



RN 479091-66-2 CAPLUS  
 CN 4-Morpholinocarboxamide, N-[ (IS)-2-[( (IR)-1-cyano-2-(2-methylphenyl)methoxy)ethyl]amino]-1-(cyclohexylmethyl)-2-oxoethyl]- (CA INDEX NAME)

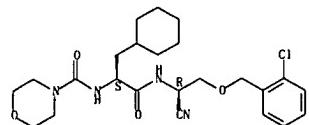
Absolute stereochemistry.



RN 479091-67-3 CAPLUS

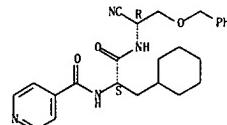
L4 ANSWER 30 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 CN 4-Morpholinocarboxamide, N-[{(1S)-2-[(1R)-2-[(2-chlorophenyl)methoxy]-1-cyanoethyl]amino}-1-(cyclohexylmethyl)-2-oxoethyl]- (CA INDEX NAME)

Absolute stereochemistry.



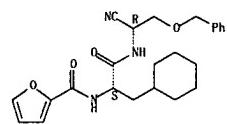
RN 479091-70-8 CAPLUS  
 CN 4-Pyridinecarboxamide, N-[{(1S)-2-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]amino}-1-(cyclohexylmethyl)-2-oxoethyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 479091-71-9 CAPLUS  
 CN 2-Furancarboxamide, N-[{(1S)-2-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]amino}-1-(cyclohexylmethyl)-2-oxoethyl]- (CA INDEX NAME)

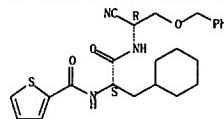
Absolute stereochemistry.



RN 479091-72-0 CAPLUS  
 CN 2-Thiophene-carboxamide, N-[{(1S)-2-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]amino}-1-(cyclohexylmethyl)-2-oxoethyl]- (CA INDEX NAME)

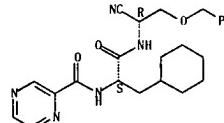
Absolute stereochemistry.

L4 ANSWER 30 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 479091-73-1 CAPLUS  
 CN Pyrazinecarboxamide, N-[{(1S)-2-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]amino}-1-(cyclohexylmethyl)-2-oxoethyl]- (CA INDEX NAME)

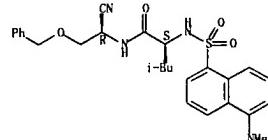
Absolute stereochemistry.



IT 290816-90-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and biol. activity of dipeptide nitriles as reversible and potent cathepsin S inhibitors (Erratum))

RN 290816-90-9 CAPLUS  
 Pentanamide, N-[{(1R)-1-cyano-2-(phenylmethoxy)ethyl]-2-[(5-(dimethylamino)-1-naphthalenyl)sulfonyl]amino}-4-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 31 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003-42252 CAPLUS

DOCUMENT NUMBER: 138:106707

TITLE: Preparation of pesticidally active aminoacetonitriles  
 INVENTOR(S): Steiger, Arthur; Eberle, Martin; Renold, Peter;  
 O'Sullivan, Anthony Cornelius; Zambach, Werner

PATENT ASSIGNEE(S): Syngenta Participations AG, Switz.

SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NM. COUNT: 1

PATENT INFORMATION:

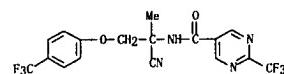
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003004474	A1	20030116	WO 2002-EP7515	20020705
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SL, TJ, TM, TN, TR, TT, TZ, UA, UC, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002325871	A1	20030121	AU 2002-325871	20020705
PRIORITY APPLN. INFO.:			CH 2001-1251	A 20010106
OTHER SOURCE(S): MARPAT 138:106707			WO 2002-EP7515	W 20020705

GRAPHIC IMAGE:

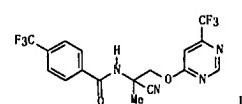
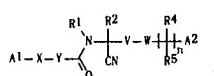
L4 ANSWER 31 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 littoralis and Tetranychus urticae.

IT 487015-51-OP  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of (hetero)aryloxymethyl substituted aminoacetonitriles as pesticides)

RN 487015-51-0 CAPLUS  
 5-Pyrimidinocarboxamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2-(trifluoromethyl)- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



**ABSTRACT:**  
 The title compds. [I]; A1, A2 = (un)substituted aryl or heteroaryl bonded via a ring carbon atom; X, Y = a bond, alkylene, alkenylene, phenylene, etc.; R1 = H, alkyl, haloalkyl, R2 = alkyl, haloalkyl, alkynyl, alkenyl, alkylene, alkyl, alkynyl, alkenylene, etc.; R3 = O, S, SO, SO<sub>2</sub>, NR3; R3 = H, alkyl, C(=O)-alkyl, alkyl-O-alkyl; n = 0-1; when n = 1, R4, R5 = H, alkyl, haloalkyl; with the proviso] and their salts, useful in controlling pests, were prepared. Thus, amidation of 2-amino-3-hydroxy-2-methylpropionitrile with 4-trifluoromethylbenzoyl chloride followed by reacting the resulting amide with 4-chloro-6-trifluoromethylpyrimidine afforded II which showed an activity of more than 80% against *Aphis craccivora* *Diabrotica ballotae*, *Spodoptera*

L4 ANSWER 32 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002-954345 CAPLUS

DOCUMENT NUMBER: 138-24952

TITLE: Preparation of novel amino nitriles useful as reversible inhibitors of cysteine proteases

INVENTOR(S): Hickey, Eugene R.; Bekkali, Younes; Patel, Usha R.; Spero, Denice M.; Thomson, David S.; Young, Erick R.

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl. 223 pp

CODEN: PIKXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

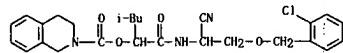
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002100849	A2	20021219	WO 2002-US17590	20020605
WO 2002100849	A3	20031016		
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US 200319827	A1	20030626	US 2002-163015	20020604
US 6982263	A1	20030626	US 2002-163015	20020604
CA 2449192	A1	20021219	CA 2002-2449192	20020605
AU 2002314898	A1	20021223	AU 2002-314898	20020605
EP 1399431	A2	20040324	EP 2002-741825	20020605
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AI, TR				
JP 2005501017	T	20050113	JP 2003-503617	20020605
MX 2003PA11113	A	20040319	MX 2003-PA11113	20031203
PRIORITY APPLN. INFO.: WO 2002-US17590			US: 2001-296863P	P 20010608
WO 2002-163015			W 20020605	

OTHER SOURCE(S): MARPAT 138:24952

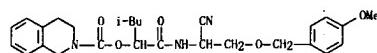
ABSTRACT:

Novel nitrile compds. YC02CR2R3C(:X)NR6CR4R5CN [Y = R1, R10, R1S, R12N, R13C, where R1 = H, (un)substituted (cyclo)alkyl, aryl, benzyl, tetrahydronaphthyl, indenyl, indanyl, alkylsulfonylalkyl, cycloalkylsulfonylalkyl, arylsulfonylalkyl, heterocycl, or heteroaryl; R2-R5 = H, (un)substituted (cyclo)alkyl, aryl, etc. or CR2R3 and CR4R5 may form rings; R6 = H, OH, or (cyclo)alkyl; X = O or S (with proviso that the pharmaceutical acceptable derivative may be prepared as a prodrug); as reversible inhibitors of cysteine proteases such as cathepsin K, S, L, and B for treating diseases and pathol. conditions exacerbated by these proteases such as osteoporosis, rheumatoid arthritis, multiple sclerosis, asthma and other autoimmune diseases, Alzheimer's disease, and atherosclerosis. Thus, morpholine-4-carboxylic acid 1-[[[benzyl(methoxymethyl)cyanomethyl]carbamoyl]-3-methylbutyl ester was prepared from N-(tert-butoxycarbonyl)-O-benzyl-L-serine, 2-hydroxyisocapric acid, and 4-morpholinocarbonyl chloride.

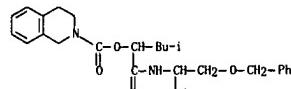
IT 478279-54-8P  
478280-12-5P  
478280-13-6P  
478280-14-7P  
478280-15-8P

L4 ANSWER 32 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
(CA INDEX NAME)

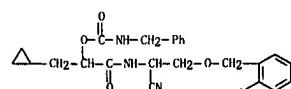
RN 478280-12-5 CAPLUS  
CN 2(1H)-Isoquinolinenecarboxylic acid, 3,4-dihydro-, 1-[[1-cyano-2-[(4-methoxyphenyl)methoxyethyl]amino]carbonyl]-3-methylbutyl ester (CA INDEX NAME)



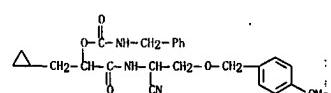
RN 478280-13-6 CAPLUS  
CN 2(1H)-Isoquinolinenecarboxylic acid, 3,4-dihydro-, 1-[[1-cyano-2-[(phenyl)methoxyethyl]amino]carbonyl]-3-methylbutyl ester (CA INDEX NAME)



RN 478280-14-7 CAPLUS  
CN Carbamic acid, (phenylmethyl)-, 2-[[2-((2-chlorophenyl)methoxy)-1-cyanoethyl]amino]-1-(cyclopropylmethyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)



RN 478280-15-8 CAPLUS  
CN Carbamic acid, (phenylmethyl)-, 2-[[1-cyano-2-[(4-methoxyphenyl)methoxyethyl]amino]carbonyl]-1-(cyclopropylmethyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)



RN 478280-18-1 CAPLUS  
CN Carbamic acid, 2-naphthalenyl-, 1-[[1-cyano-2-[(4-methoxyphenyl)methoxyethyl]amino]carbonyl]cyclohexyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 32 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

478280-18-1P 478280-19-2P 478280-27-2P

478280-28-3P 478280-29-4P 478280-30-7P

478280-31-8P 478280-32-9P 478280-33-0P

478280-34-1P 478280-35-2P 478280-36-3P

478280-37-4P 478280-38-5P 478280-39-6P

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478281-82-2P 478281-85-5P 478281-88-8P

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RL PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of novel amino nitriles as reversible inhibitors of cysteine

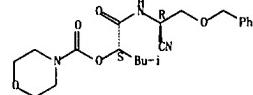
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RN 478279-49-1 CAPLUS

CN 4-Morpholinocarboxylic acid, (IS)-1-[[[(IR)-1-cyano-2-

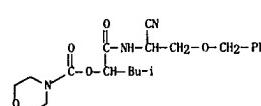
-(phenylmethoxy)ethyl]amino]carbonyl]-3-methylbutyl ester (CA INDEX NAME)

Absolute stereochemistry.



RN 478279-54-8 CAPLUS

CN 4-Morpholinocarboxylic acid, I-[[[(1-cyano-2-(phenylmethoxy)ethyl)amino]carbonyl]-3-methylbutyl ester (CA INDEX NAME)



RN 478280-11-4 CAPLUS

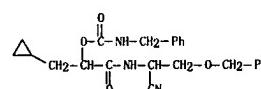
CN 2(1H)-Isoquinolinenecarboxylic acid, 3,4-dihydro-, 1-[[2-[(2-chlorophenyl)methoxy]ethyl]amino]carbonyl]-3-methylbutyl ester

L4 ANSWER 32 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 478280-16-9 CAPLUS

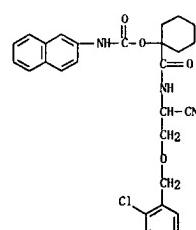
CN Carbamic acid, (phenylmethyl)-, 2-[[1-cyano-2-(phenylmethoxy)ethyl]amino]-

1-(cyclopropylmethyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)



RN 478280-17-0 CAPLUS

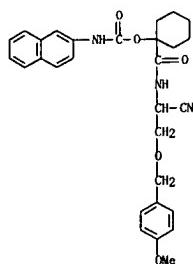
CN Carbamic acid, 2-naphthalenyl-, 1-[[2-[(2-chlorophenyl)methoxy]ethyl]amino]carbonyl]-3-methylbutyl ester (9CI) (CA INDEX NAME)



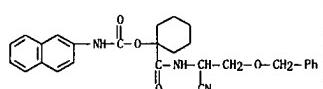
RN 478280-18-1 CAPLUS

CN Carbamic acid, 2-naphthalenyl-, 1-[[1-cyano-2-(4-methoxyphenyl)methoxyethyl]amino]carbonyl]-3-methylbutyl ester (9CI) (CA INDEX NAME)

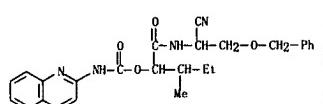
L4 ANSWER 32 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 478280-19-2 CAPLUS  
CN Carbamic acid, 2-naphthalenyl-, 1-[[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]cyclohexyl ester (9CI) (CA INDEX NAME)

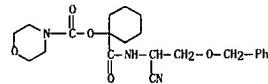


RN 478280-27-2 CAPLUS  
CN Carbamic acid, 2-quinolinyl-, 1-[[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]2-methylbutyl ester (9CI) (CA INDEX NAME)

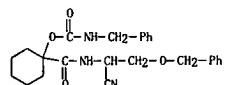


RN 478280-29-3 CAPLUS  
CN Carbamic acid, (phenylmethyl)-, 1-[[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]3-methylbutyl ester (9CI) (CA INDEX NAME)

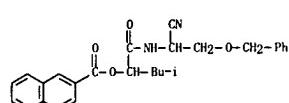
L4 ANSWER 32 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



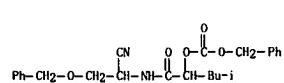
RN 478280-33-0 CAPLUS  
CN Carbamic acid, (phenylmethyl)-, 1-[[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]cyclohexyl ester (9CI) (CA INDEX NAME)



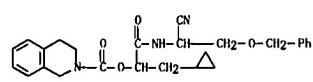
RN 478280-34-1 CAPLUS  
CN 2-Naphthalene carboxylic acid, 1-[[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]3-methylbutyl ester (CA INDEX NAME)



RN 478280-35-2 CAPLUS  
CN Carbamic acid, 1-[[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]3-methylbutyl phenylmethyl ester (CA INDEX NAME)

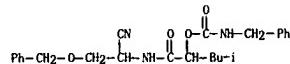


RN 478280-36-3 CAPLUS  
CN 2(H)-Isoquinolinecarboxylic acid, 3,4-dihydro-, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]1-(cyclopropylmethyl)-2-oxoethyl ester (CA INDEX NAME)

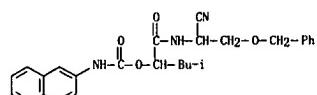


RN 478280-37-4 CAPLUS  
CN 2-Naphthalene carboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-

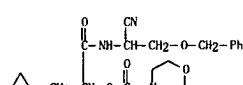
L4 ANSWER 32 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



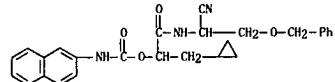
RN 478280-29-4 CAPLUS  
CN Carbamic acid, 2-naphthalenyl-, 1-[[[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]3-methylbutyl ester (9CI) (CA INDEX NAME)



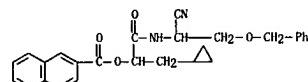
RN 478280-30-7 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-(cyclopropylmethyl)-2-oxoethyl ester (CA INDEX NAME)



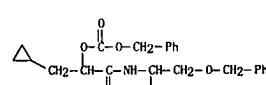
RN 478280-31-8 CAPLUS  
CN Carbamic acid, 2-naphthalenyl-, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-(cyclopropylmethyl)-2-oxoethyl ester (9CI) (CA INDEX NAME)



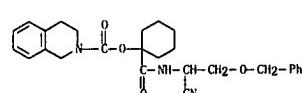
RN 478280-32-9 CAPLUS  
CN 4-Morpholinocarboxylic acid, 1-[[[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]cyclohexyl ester (CA INDEX NAME)

L4 ANSWER 32 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
(cyclopropylmethyl)-2-oxoethyl ester (CA INDEX NAME)

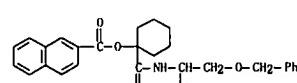
RN 478280-38-5 CAPLUS  
CN Carbamic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-(cyclopropylmethyl)-2-oxoethyl phenylmethyl ester (CA INDEX NAME)



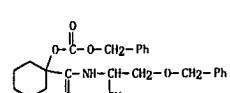
RN 478280-39-6 CAPLUS  
CN 2(H)-Isoquinolinecarboxylic acid, 3,4-dihydro-, 1-[[[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]cyclohexyl ester (CA INDEX NAME)



RN 478280-40-9 CAPLUS  
CN 2-Naphthalene carboxylic acid, 1-[[[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]cyclohexyl ester (CA INDEX NAME)



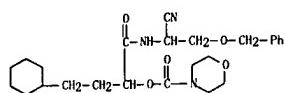
RN 478280-41-0 CAPLUS  
CN Carbamic acid, 1-[[[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]cyclohexyl phenylmethyl ester (CA INDEX NAME)



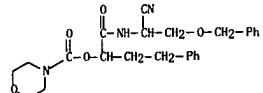
RN 478280-42-1 CAPLUS



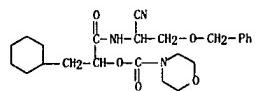
## L4 ANSWER 32 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



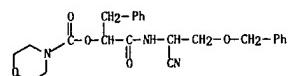
RN 478281-21-9 CAPLUS  
CN 4-Morpholinocarboxylic acid, 1-[[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-phenylpropyl ester (CA INDEX NAME)



RN 478281-25-3 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-(cyclohexylmethyl)-2-oxoethyl ester (CA INDEX NAME)

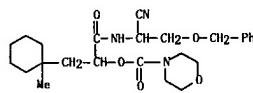


RN 478281-28-6 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-2-oxo-1-(phenylmethyl)ethyl ester (CA INDEX NAME)

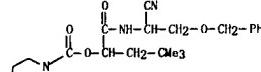


RN 478281-31-1 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-[(1-methylcyclohexyl)methyl]-2-oxoethyl ester (CA INDEX NAME)

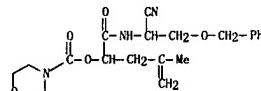
## L4 ANSWER 32 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



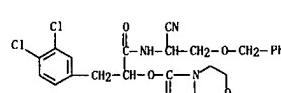
RN 478281-34-4 CAPLUS  
CN 4-Morpholinocarboxylic acid, 1-[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3,3-dimethylbutyl ester (CA INDEX NAME)



RN 478281-37-7 CAPLUS  
CN 4-Morpholinocarboxylic acid, 1-[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-methyl-3-buteneyl ester (SC1) (CA INDEX NAME)

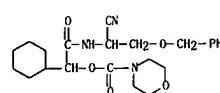


RN 478281-40-2 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-[(3,4-dichlorophenyl)methyl]-2-oxoethyl ester (CA INDEX NAME)

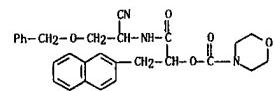


RN 478281-43-5 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-cyclohexyl-2-oxoethyl ester (CA INDEX NAME)

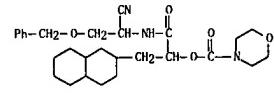
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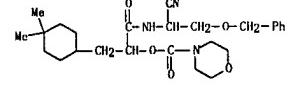
RN 478281-46-8 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-(2-naphthalenylmethyl)-2-oxoethyl ester (CA INDEX NAME)



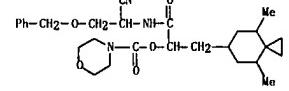
RN 478281-49-1 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-[(decahydro-2-naphthalenyl)methyl]-2-oxoethyl ester (CA INDEX NAME)



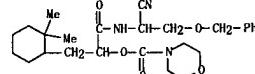
RN 478281-52-6 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-[(4,4-dimethylcyclohexyl)methyl]-2-oxoethyl ester (CA INDEX NAME)



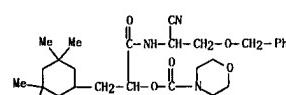
RN 478281-55-9 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-[(4,8-dimethylspiro[2.5]oct-6-yl)methyl]-2-oxoethyl ester (CA INDEX NAME)



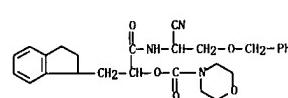
RN 478281-58-2 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-

L4 ANSWER 32 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
[(2,2-dimethylcyclohexyl)methyl]-2-oxoethyl ester (CA INDEX NAME)

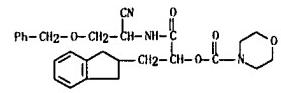
RN 478281-61-7 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-2-oxo-1-[(3,3,5,5-tetramethylcyclohexyl)methyl]-2-oxoethyl ester (CA INDEX NAME)



RN 478281-64-0 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-[(2,3-dihydro-1H-inden-2-yl)methyl]-2-oxoethyl ester (CA INDEX NAME)



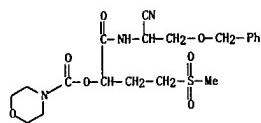
RN 478281-67-3 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-[(2,3-dihydro-1H-inden-2-yl)methyl]-2-oxoethyl ester (CA INDEX NAME)



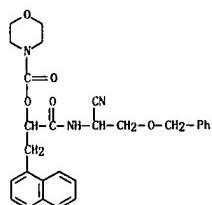
RN 478281-70-8 CAPLUS  
CN 4-Morpholinocarboxylic acid, 1-[(1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-(methylsulfonyl)propyl ester (CA INDEX NAME)



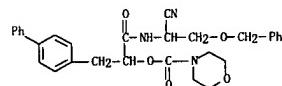
## L4 ANSWER 32 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



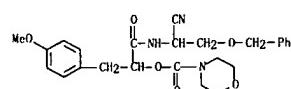
RN 478281-73-1 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-(1-naphthalenylmethyl)-2-oxoethyl ester (CA INDEX NAME)



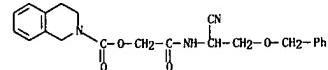
RN 478281-76-4 CAPLUS  
CN 4-Morpholinocarboxylic acid, 1-((1,1'-biphenyl)-4-ylmethyl)-2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-2-oxoethyl ester (CA INDEX NAME)



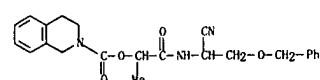
RN 478281-79-7 CAPLUS  
CN 4-Morpholinocarboxylic acid, 2-[[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-[(4-methoxyphenyl)methyl]-2-oxoethyl ester (CA INDEX NAME)



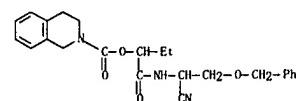
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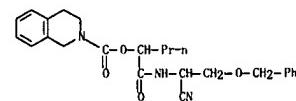
RN 478281-91-3 CAPLUS  
CN 2(1H)-Isoquinolinocarboxylic acid, 3,4-dihydro-, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-methyl-2-oxoethyl ester (CA INDEX NAME)



RN 478281-92-4 CAPLUS  
CN 2(1H)-Isoquinolinocarboxylic acid, 3,4-dihydro-, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]propyl ester (CA INDEX NAME)

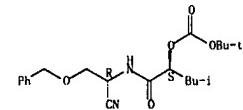
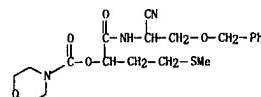


RN 478281-93-5 CAPLUS  
CN 2(1H)-Isoquinolinocarboxylic acid, 3,4-dihydro-, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]butyl ester (CA INDEX NAME)

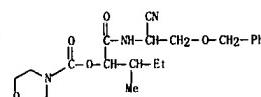


RN 478281-94-6 CAPLUS  
CN Carboxic acid, (1S)-1-[[[(1R)-1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-methylbutyl 1,1-dimethylethyl ester (CA INDEX NAME)

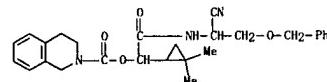
Absolute stereochemistry.

L4 ANSWER 32 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
RN 478281-82-2 CAPLUS  
CN 4-Morpholinocarboxylic acid, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-(methylthio)propyl ester (CA INDEX NAME)

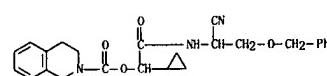
RN 478281-85-5 CAPLUS  
CN 4-Morpholinocarboxylic acid, 1-[[[1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-2-methylbutyl ester (CA INDEX NAME)



RN 478281-88-8 CAPLUS  
CN 2(1H)-Isoquinolinocarboxylic acid, 3,4-dihydro-, 2-[(1-cyano-2-(2H)-isoquinolinocarboxylic acid, 3,4-dihydro-, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-2-oxoethyl ester (CA INDEX NAME)



RN 478281-89-9 CAPLUS  
CN 2(1H)-Isoquinolinocarboxylic acid, 3,4-dihydro-, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-1-cyclopropyl-2-oxoethyl ester (CA INDEX NAME)

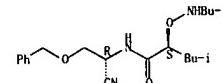


RN 478281-90-2 CAPLUS  
CN 2(1H)-Isoquinolinocarboxylic acid, 3,4-dihydro-, 2-[(1-cyano-2-(phenylmethoxy)ethyl]amino]-2-oxoethyl ester (CA INDEX NAME)

## L4 ANSWER 32 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 478281-95-7 CAPLUS  
CN Pentanamide, N-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]-2-[(1,1-dimethylethyl)amino]oxy-4-methyl-, (2S)- (CA INDEX NAME)

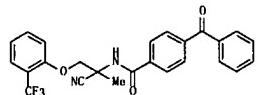
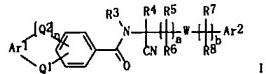
Absolute stereochemistry.



L4 ANSWER 33 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002-888695 CAPLUS  
 DOCUMENT NUMBER: 137-384655  
 TITLE: Preparation of benzamidoacetanitriles for controlling parasites  
 INVENTOR(S): Ducray, Pierre; Bouvier, Jacques; Keller, Matthias;  
 Bergamin, Corina  
 PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis-Erfindungen  
 Verwaltungsgesellschaft m.b.H.: Novartis Pharma GmbH  
 SOURCE: PCT Int. Appl., 81 pp.  
 CODEN: PIIXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002092552	A2	20021121	WO 2002-EP5294	20020514
WO 2002092552	A3	20031211		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CD, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GR, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LX, LT, LU, LV, MA, MD, MK, MN, MX, NO, NZ, OG, PH, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VN, YU, ZA, ZW				
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
CA 2447084	A1	20021121	CA 2002-2447084	20020514
AU 2002316903	A1	20021125	AU 2002-316903	20020514
EP 1390344	A2	20040225	EP 2002-745292	20020514
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NZ 5293668	A	20050624	NZ 2002-5293668	20020514
RU 2284990	C2	20061010	RU 2003-134179	20020514
AT 349421	T	20070115	AT 2002-745292	20020514
ZA 200308592	A	20040903	ZA 2003-8592	20031104
IN 2003CN01783	A	20060106	IN 2003-CN1783	20031113
MX 2003PA10404	A	20040309	MX 2003-PA10404	20031114
US 200420055	A1	20041104	US 2004-477289	20040601
PRIORITY APPLN. INFO. :				
OTHER SOURCE(S): MARPAT 137:384655				
GRAPHIC IMAGE:				

L4 ANSWER 33 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



ABSTRACT:

The title compds. [I]; Ar1, Ar2 = (un)substituted Ph, OPh, phenylacetylenyl, etc.; Q1 = CH2, OCH2, S, SO, SO2; CO: Q2 = a bond, CO; R3 = H, alkyl, haloalkyl, etc.; R4-R8 = H, halo, alkyl, etc.; or R4 and R5 together = alkylene; W = O, S, SO2, NH, Nalkyl; a = 1-4; b = 0-4; n = 0-1] which have advantageous pesticidal properties, and are especially suitable for controlling parasites in warm-blooded animals (also humans), were prepared and formulated. Thus, amidation of benzophenone-4-carboxylic acid with 2-amino-2-methyl-3-(2-trifluoromethylphenoxy)propionitrile afforded II which showed a 100% reduction in Trichostyngolus infestation at 32 mg/kg.

IT 476013-54-4 476013-55-5P 476013-56-6P

476013-59-9P 476013-58-8P 476013-59-9P

476013-62-4P 476013-61-3P 476013-62-4P

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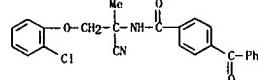
476013-66-8P 476013-67-9P

RL: AGR (Agricultural use); SPU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzamidoacetanitriles for controlling parasites)

RN 476013-54-4 CAPLUS

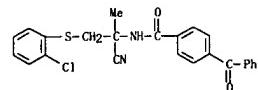
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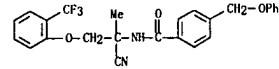
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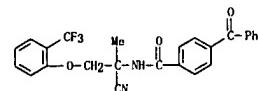
L4 ANSWER 33 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



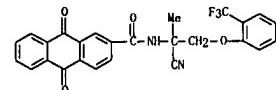
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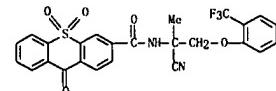
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 CN Benzamide, 4-benzoyl-N-[1-cyano-1-methyl-2-[2-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



RN 476013-58-8 CAPLUS  
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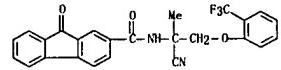


RN 476013-59-9 CAPLUS  
 CN 9H-Thioxanthene-3-carboxamide, N-[1-cyano-1-methyl-2-[2-(trifluoromethyl)phenoxy]ethyl]-9-oxo-, 10,10-dioxide (CA INDEX NAME)

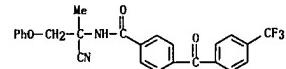


L4 ANSWER 33 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

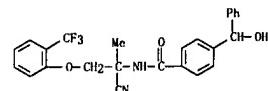
RN 476013-60-2 CAPLUS  
 CN 9H-Fluorene-2-carboxamide, N-[1-cyano-1-methyl-2-[2-(trifluoromethyl)phenoxy]ethyl]-9-oxo- (CA INDEX NAME)



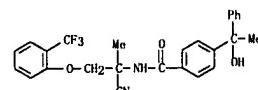
RN 476013-61-3 CAPLUS  
 CN Benzamide, N-[1-cyano-1-methyl-2-phenoxyethyl]-4-[4-(trifluoromethyl)benzoyl]- (CA INDEX NAME)



RN 476013-62-4 CAPLUS  
 CN Benzamide, N-[1-cyano-1-methyl-2-[2-(trifluoromethyl)phenoxy]ethyl]-4-(hydroxyphenylmethyl)- (CA INDEX NAME)

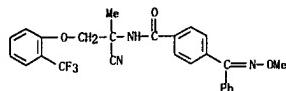


RN 476013-63-5 CAPLUS  
 CN Benzamide, N-[1-cyano-1-methyl-2-[2-(trifluoromethyl)phenoxy]ethyl]-4-(1-hydroxy-1-phenylethyl)- (CA INDEX NAME)

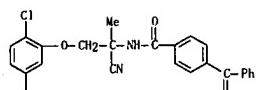


RN 476013-64-6 CAPLUS  
 CN Benzamide, N-[1-cyano-1-methyl-2-[2-(trifluoromethyl)phenoxy]ethyl]-4-(methoxyimino)methyl)- (CA INDEX NAME)

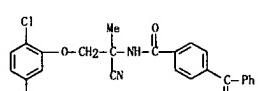
L4 ANSWER 33 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



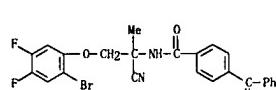
RN 476013-65-7 CAPLUS  
 CN Benzamide, 4-benzoyl-N-[2-(2-chloro-5-methylphenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



RN 476013-66-8 CAPLUS  
 CN Benzamide, 4-benzoyl-N-[1-cyano-2-(2,5-dichlorophenoxy)-1-methylethyl]- (CA INDEX NAME)



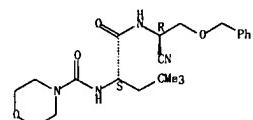
RN 476013-67-9 CAPLUS  
 CN Benzamide, 4-benzoyl-N-[2-(2-bromo-4,5-difluorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



L4 ANSWER 34 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 BIOL (Biological study); PREP (Preparation) (prep. and biol. activity of dipeptide nitriles as reversible and potent cathepsin S inhibitors)

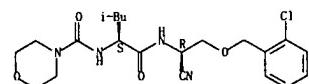
RN 290816-78-3 CAPLUS  
 CN 4-Morpholinecarboxamide, N-[{(1S)-1-[(1R)-1-cyano-2-(phenylmethoxyethyl]amino]carbonyl}-3,3-dimethylbutyl]- (CA INDEX NAME)

Absolute stereochemistry.



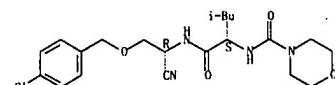
RN 290816-82-9 CAPLUS  
 CN 4-Morpholinecarboxamide, N-[{(1S)-1-[(1R)-2-[(2-chlorophenyl)methoxy]-1-cyanoethyl]amino]carbonyl]-3-methylbutyl]- (CA INDEX NAME)

Absolute stereochemistry.



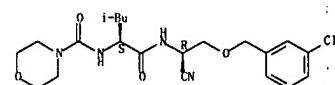
RN 290816-83-0 CAPLUS  
 CN 4-Morpholinecarboxamide, N-[{(1S)-1-[(1R)-2-[(4-chlorophenyl)methoxy]-1-cyanoethyl]amino]carbonyl]-3-methylbutyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 290816-89-6 CAPLUS  
 CN 4-Morpholinecarboxamide, N-[{(1S)-1-[(1R)-2-[(3-chlorophenyl)methoxy]-1-cyanoethyl]amino]carbonyl]-3-methylbutyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 290816-91-0 CAPLUS  
 CN 4-Morpholinecarboxamide, N-[{(1S)-1-[(1R)-1-cyano-2-(2-

L4 ANSWER 34 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002:835002 CAPLUS  
 DOCUMENT NUMBER: 138:56234

TITLE: Design and synthesis of dipeptide nitriles as reversible and potent cathepsin S inhibitors  
 AUTHOR(S): Ward, Yancey D.; Thomson, David S.; Frye, Leah L.; Cywin, Charles L.; Morwick, Tina; Emmanuel, Michel J.; Zindell, Renee; McNeil, Daniel; Bekkali, Younes; Giradot, Marc; Hrapchak, Matt; Defuri, Molly; Crane, Kathy; White, Debra; Pav, Susan; Wang, Yong; Hao, Ming-hong; Grygorowicz, Christine A.; Labadia, Mark J.; O'Donnell, M.; Davidson, Walter; Hopkins, Jerry L.; Brown, Maryanne L.; Spero, Denise M.

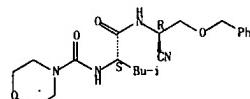
CORPORATE SOURCE: Boehringer Ingelheim Pharmaceuticals, Ridgefield, CT, 06877-0368, USA  
 SOURCE: Journal of Medicinal Chemistry (2002), 45(25), 5471-5482  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 138:56234

ABSTRACT: The specificity of the immune response relies on processing of foreign proteins and presentation of antigenic peptides at the cell surface. Inhibition of antigen presentation, and the subsequent activation of T-cells, should, in theory, modulate the immune response. The cysteine protease cathepsin S performs a fundamental step in antigen presentation and therefore represents an attractive target for inhibition. In this paper, the authors describe a series of potent and reversible Cathepsin S inhibitors based on dipeptide nitriles. These inhibitors show nanomolar inhibition of the target enzyme as well as cellular potency in a human B cell line. The first x-ray crystal structure of a reversible inhibitor co-crystallized with cathepsin S is also reported.

IT 290816-77-2P  
 RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (preparation and biol. activity of dipeptide nitriles as reversible and potent cathepsin S inhibitors)

RN 290816-77-2 CAPLUS  
 CN 4-Morpholinecarboxamide, N-[(1S)-1-[(1R)-1-cyano-2-(phenylmethoxyethyl]amino]carbonyl]-3-methylbutyl]- (CA INDEX NAME)

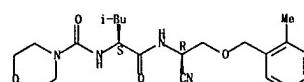
Absolute stereochemistry.



IT 290816-78-3P 290816-82-9P 290816-83-0P  
 290816-89-6P 290816-91-0P 290817-02-6P  
 479091-65-0P 479091-66-2P 479091-67-3P  
 479091-70-8P 479091-71-9P 479091-72-0P  
 479091-73-1P  
 RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);

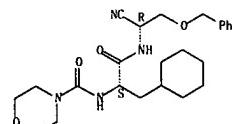
L4 ANSWER 34 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 BIOL (Biological study); PREP (Preparation) (prep. and biol. activity of dipeptide nitriles as reversible and potent cathepsin S inhibitors)

Absolute stereochemistry.



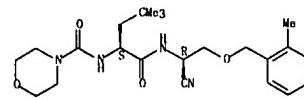
RN 290817-02-6 CAPLUS  
 CN 4-Morpholinecarboxamide, N-[(1S)-2-[(1R)-1-cyano-2-(phenylmethoxyethyl]amino]-1-(cyclohexylmethyl)-2-oxoethyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 479091-65-1 CAPLUS  
 CN 4-Morpholinecarboxamide, N-[(1S)-1-[(1R)-1-cyano-2-(2-methylphenyl)methoxyethyl]amino]carbonyl]-3,3-dimethylbutyl]- (CA INDEX NAME)

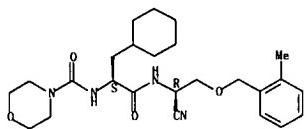
Absolute stereochemistry.



RN 479091-66-2 CAPLUS  
 CN 4-Morpholinecarboxamide, N-[(1S)-2-[(1R)-1-cyano-2-(2-methylphenyl)methoxyethyl]amino]-1-(cyclohexylmethyl)-2-oxoethyl]- (CA INDEX NAME)

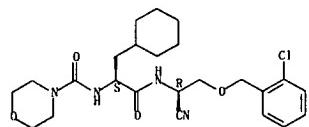
Absolute stereochemistry.

L4 ANSWER 34 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



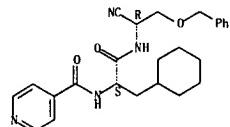
RN 479091-67-3 CAPLUS  
CN N-[Morpholinecarboxamide, N-[(1S)-2-[[((1R)-2-[(2-chlorophenyl)ethoxy]-1-cyanoethyl)amino]-1-(cyclohexylmethyl)-2-oxoethyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 479091-70-8 CAPLUS  
CN 4-Pyridinecarboxamide, N-[(1S)-2-[[((1R)-1-cyano-2-(phenylmethoxy)ethyl)amino]-1-(cyclohexylmethyl)-2-oxoethyl]- (CA INDEX NAME)

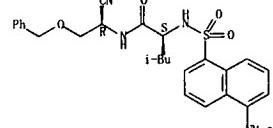
Absolute stereochemistry.



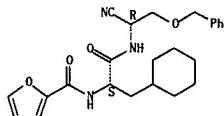
RN 479091-71-9 CAPLUS  
CN 2-Furanecarboxamide, N-[(1S)-2-[[((1R)-1-cyano-2-(phenylmethoxy)ethyl)amino]-1-(cyclohexylmethyl)-2-oxoethyl]- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 34 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

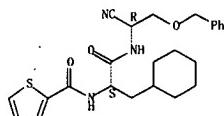


L4 ANSWER 34 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



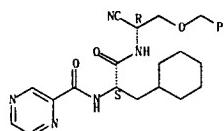
RN 479091-72-0 CAPLUS  
CN 2-Thiophene carboxamide, N-[(1S)-2-[[((1R)-1-cyano-2-(phenylmethoxy)ethyl)amino]-1-(cyclohexylmethyl)-2-oxoethyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 479091-73-1 CAPLUS  
CN Pyrazinecarboxamide, N-[(1S)-2-[[((1R)-1-cyano-2-(phenylmethoxy)ethyl)amino]-1-(cyclohexylmethyl)-2-oxoethyl]- (CA INDEX NAME)

Absolute stereochemistry.



IT 290816-90-9P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and biol. activity of dipeptide nitriles as reversible and potent cathepsin S inhibitors)

RN 290816-90-9 CAPLUS  
CN Pentanamide, N-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]-2-[[{(5-(dimethylamino)-1-naphthalenyl}sulfonyl]amino]-4-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 35 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:504769 CAPLUS  
DOCUMENT NUMBER: 137:78946

TITLE: Preparation of isothiazolecarboxamides as agrochem. microbicides

INVENTOR(S): Kitagawa, Yoshinori; Sawada, Haruko; Aszmann, Lutz

PATENT ASSIGNEE(S): Nihon Bayer Agrochem K.K., Japan

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

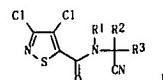
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002051822	A2	20020704	WO 2001-EP14447	20011210
WO 2002051822	A3	20020101		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MZ, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZR				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, RU, BJ, CF, CG, CI, CR, DO, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2002123095	A	20020710	JP 2000-390318	20001222
AU 2002216086	A1	20020703	AU 2002-216086	20011210
PRIORITY APPLN. INFO.:			JP 2000-390318	20001222
OTHER SOURCE(S): MARPAT 137:78946			WO 2001-EP14447	20011210
GRAPHIC IMAGE:				



ABSTRACT:  
The title compds. [I]: R1 = H, cyanoethyl; R2 = H, Me; R3 = H, alkyl, methoxycarbonylphenoxymethyl; provided that R1, R2 and R3 are not simultaneously a hydrogen atom which are useful in agriculture and horticulture, particularly as fungicides, were prepared. Thus, reacting 3,4-dichloroisothiazole-5-carbonyl chloride with 1-cyanoctanoamine in the presence of Et3N in CH2Cl2 afforded I (R1, R2 = H; R3 = n-C7H15) which showed control values of more than 90% against Pyricularia oryzae at 500 ppm.

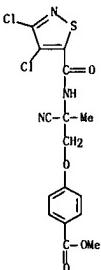
IT 439898-30-3P  
RL: AGR (Agricultural) use; BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of isothiazolecarboxamides as agrochem. microbicides)

RN 439898-30-3 CAPLUS

CN Benzoic acid, 4-[2-cyano-2-[(3,4-dichloro-5-isothiazolyl)carbonyl]amino]propoxy-, methyl ester (CA INDEX NAME)

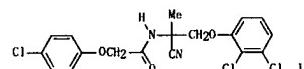
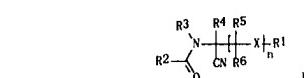
L4 ANSWER 35 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 36 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002-487545 CAPLUS  
 DOCUMENT NUMBER: 137:63070  
 TITLE: Preparation of N-acyl aminoacetonitriles having  
 pesticidal properties  
 INVENTOR(S): Ducray, Pierre; Steiger, Arthur; Bouvier, Jacques;  
 Zambach, Werner  
 PATENT ASSIGNEE(S): Syngenta Participations Ag, Switz.  
 SOURCE: PCT Int. Appl., 55 pp.  
 CODEN: PIAXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002050052	A1	20020627	WO 2001-EP14922	20011218
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MW, NX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, DA, UG, US, UZ, VN, YU, ZA, ZB, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MV, MZ, SD, SL, SZ, TZ, UG, ZW, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GG, GW, ML, MR, NE, SN, TD, TG				
AU 2002024942	A5	20020701	AU 2002-24942	20021218
PRIORITY APPLN. INFO. :			CH 2000-2490	A 20001220
OTHER SOURCE(S):	MARPAT 137:63070		WO 2001-EP14922	W 20011218

GRAPHIC IMAGE:

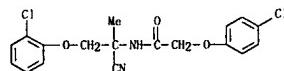


**ABSTRACT:**  
 The title compds. [I; R1 = (un)substituted aryl, heteroaryl; R2 = alkyl, haloalkyl; R3 = H, alkyl, haloalkyl; R4-R6 = H, halo, alkyl, haloalkyl; R7 = halo, alkyl, haloalkoxy; X = O, S, SO, SO2; n = 0-1] which have advantageous pesticidal properties and are suitable for the control of parasites in warm-blooded organisms and of plant pests, were prepared. Thus, amidation of 2-amino-3-(2,3-dichlorophenoxy)-2-methylpropionitrile with 4-chlorophenoxyacetic acid afforded the aminoacetonitrile II. Compds. I exhibit good activity against Heliothis virescens, Plutella xylostella and Diabrotica balteata.

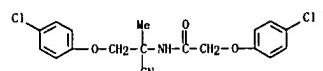
L4 ANSWER 36 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

IT 439124-09-1P 439124-11-5P 439124-13-7P  
 439124-15-3P 439124-17-1P 439124-19-3P  
 439124-20-6P 439124-22-8P 439124-24-0P  
 439124-26-2P 439124-27-3P 439124-28-4P  
 439124-29-5P 439124-30-8P 439124-32-0P  
 439124-34-2P 439124-36-4P 439124-38-6P  
 439124-40-0P 439124-42-2P 439124-44-4P  
 439124-46-6P 439124-48-8P 439124-50-2P  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); B10L (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of N-acyl aminoacetonitriles having pesticidal properties)

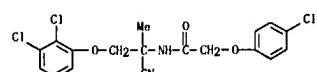
RN 439124-09-1 CAPLUS  
 CN Acetamide, 2-(4-chlorophenoxy)-N-[2-(2-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



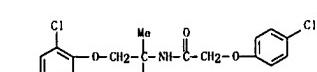
RN 439124-11-5 CAPLUS  
 CN Acetamide, 2-(4-chlorophenoxy)-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



RN 439124-13-7 CAPLUS  
 CN Acetamide, 2-(4-chlorophenoxy)-N-[1-cyano-2-(2,3-dichlorophenoxy)-1-methylethyl]- (CA INDEX NAME)

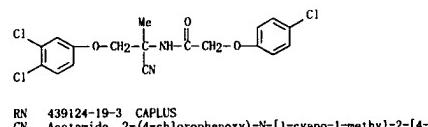


RN 439124-15-9 CAPLUS  
 CN Acetamide, 2-(4-chlorophenoxy)-N-[1-cyano-2-(2,4-dichlorophenoxy)-1-methylethyl]- (CA INDEX NAME)

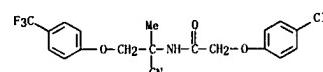


RN 439124-17-1 CAPLUS  
 CN Acetamide, 2-(4-chlorophenoxy)-N-[1-cyano-2-(3,4-dichlorophenoxy)-1-methylethyl]- (CA INDEX NAME)

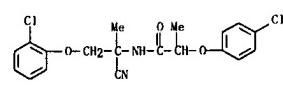
L4 ANSWER 36 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



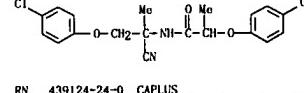
RN 439124-19-3 CAPLUS  
 CN Acetamide, 2-(4-chlorophenoxy)-N-[1-cyano-1-(trifluoromethyl)phenoxyethyl]- (CA INDEX NAME)



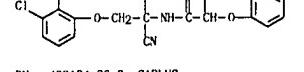
RN 439124-20-6 CAPLUS  
 CN Propenamide, 2-(4-chlorophenoxy)-N-[2-(2-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



RN 439124-22-8 CAPLUS  
 CN Propanamide, 2-(4-chlorophenoxy)-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



RN 439124-24-0 CAPLUS  
 CN Propanamide, 2-(4-chlorophenoxy)-N-[1-cyano-2-(2,3-dichlorophenoxy)-1-methylethyl]- (CA INDEX NAME)



RN 439124-26-2 CAPLUS  
 CN Propanamide, 2-(4-chlorophenoxy)-N-[1-cyano-2-(2,4-dichlorophenoxy)-1-methylethyl]- (CA INDEX NAME)



## L4 ANSWER 37 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002-264520 CAPLUS

DOCUMENT NUMBER: 137-278955

TITLE: Stereoselective cyanoisilylation of  $\alpha$ -sulfinyl ketimines or its covalently stabilized enamine tautomers. Synthesis of enantiomerically pure  $\alpha$ -sulfinylmethyl- $\alpha$ -amino nitriles.

AUTHOR(S): Achkeri, Hassan; Alvarez-Ibarra, Carlos; De Dios, Alfonso; Quiroga, Maria L.

CORPORATE SOURCE: Departamento de Química Orgánica, Facultad de Ciencias Químicas, Ciudad Universitaria, Universidad Complutense, Madrid, 28040, Spain

SOURCE: Tetrahedron (2002), 58(16), 3217-3227

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:278955

ABSTRACT:

$\alpha$ -Sulfinyl ketimines and  $\beta$ -sulfinyl enamines undergo reaction with delivery cyanide reagents such as (trimethylsilyl)cyanide or (tert-butylidimethylsilyl)cyanide in the presence of either stoichiometric excesses of ZnCl<sub>2</sub> or ZnBr<sub>2</sub>, or catalytic amounts of Yb(TFO)<sub>3</sub>. Ketimines included (-)-4-methoxy-N-[2-[(R)-4-methylphenyl]sulfinyl]-1-phenylethylidenebenzenamine, (+)-3-[(R)-2-[(E)-2-[(R)-4-methyl-azaspiro[4.5]dec-3-ene-1-N-[(1E)-2-[(R)-4-methylphenyl]sulfinyl]ethenyl]-N-(phenylmethyl)benzenemethanamine. The use of ZnCl<sub>2</sub> in alic. solvents provides the best diastereoselectivity. It is mediated by a chelated transition state, the p-tolyl group driving the anti attack of the reagent. By using Yb(TFO)<sub>3</sub> poor diastereoselectivities but good yields are obtained. It seems that an iminium derivative originated by metal coordination with either the nitrogen or oxygen atom in the substrate is responsible for the observed results. Interestingly,  $\beta$ -sulfinyl enamines provide analogous  $\alpha$ -amino nitriles in the same reaction conditions. It allowed the cyanoisilylation of the covalently stabilized enamines arising from unstable  $\beta$ -sulfinyl aldehydes.

IT 466671-16-OP 466671-17-OP 466671-19-2P

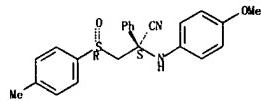
466671-20-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of enantiomerically pure  $\alpha$ -amino- $\alpha$ -(sulfinylmethyl) nitriles by stereoselective cyanoisilylation of  $\alpha$ -sulfinyl ketimines or their enamine tautomers)

RN 466671-16-9 CAPLUS

CN Benzenecetonitrile,  $\alpha$ -[(4-methoxyphenyl)amino]- $\alpha$ -[(R)-(4-methylphenyl)sulfinyl]methyl]-, (S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 466671-17-0 CAPLUS

CN Benzenecetonitrile,  $\alpha$ -[(4-methoxyphenyl)amino]- $\alpha$ -[(R)-(4-methylphenyl)sulfinyl]methyl]-, (R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



## L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001-951106 CAPLUS

DOCUMENT NUMBER: 135-371998

TITLE: Preparation of N-substituted peptidyl nitriles as cysteine cathepsin inhibitors

INVENTOR(S): Cowen, Scott Douglas; Greenspan, Paul David; McQuire, Leslie Wrighton; Tommasi, Ruben Alberto; Van Duzer, John Henry

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfundenungen Verwaltungsgesellschaft m.b.H.

SOURCE: PCT Int. Appl., 69 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001087828	A1	2001-11-22	WO 2001-EP5463	20010514
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FR, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2407463	A1	2001-12-05	CA 2001-2407463	20010514
EP I283828	A1	2002-02-05	EP 2001-977958	20010514
EP I283828	BI	20050914		
R: AT, BE, CH, DE, DK, ES, FR, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003533506	T	2003-11-11	JP 2001-584225	20010514
AT 304526	T	20050915	AT 2001-977958	20010514
ES 2249482	T3	2006-04-01	ES 2001-1977958	20010514
US 2003158256	A1	2003-08-21	US 2002-275583	20021107
US 6812237	B2	2004-11-02		
PRORITY APPLN. INFO. :		US: 2000-204217P	P	20000515
OTHER SOURCE(S):		WO 2001-EP5463	W	20010514

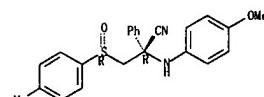
ABSTRACT:

Peptidyl nitriles R1NOHCR2R3CONHCIR4R5CN [R1 is (bi)aryl; R2 is (bi)aryl-lower alkyl, benzofused cycloalkyl, (bi)cycloalkyl-lower alkyl, aryl-alkyl or alkyl, or aryl-C2-C7-alkyl] in which C2-C7-alkyl is interrupted by Y; R3 is H, O, S, SO, NH or NHCO; R4 is H or lower alkyl; R2 and R3 combined by C2-C7-alkylene or arylalkylene interrupted by Y; R4 is H or lower alkyl; R5 is H, optionally substituted lower alkyl, (bi)aryl-lower alkyl, (bi)cycloalkyl-lower alkyl, aryl-alkyl, aryl-alkoxy-lower alkyl, or aryl-C2-C7-alkyl in which C2-C7-alkyl is interrupted by Y or their pharmaceutically acceptable salts were prepared as cysteine cathepsin inhibitors. Thus, N-[2-(3-carboxy-4-fluorobenzylxy)-1(S)-cyanoethyl]-3-methyl-N-phenyl- $\alpha$ -phenylalanamide was prepared by condensation of (S)-2-amino-3-[3-[(2-(trimethylsilyl)ethoxy]carbonyl]-4-fluorobenzylxy]propionitrile with N-phenyl-3-methyl-L-phenylalanine (syntheses given), followed by ester cleavage.

IT 374118-06-6P 374118-08-8P 374118-09-9P  
374118-10-2P 374118-11-3P 374118-12-1P  
374118-13-3P 374118-14-6P 374118-15-7P  
374118-16-8P 374118-18-9P 374118-19-1P  
374118-22-5P 374118-23-6P 374118-23-7P  
374118-24-8P 374118-25-9P 374118-26-7P  
374118-27-1P 374118-28-2P 374118-29-3P  
374118-30-6P 374118-31-7P 374118-32-8P

## L4 ANSWER 37 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

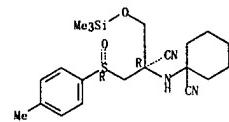
Absolute stereochemistry. Rotation (-).



RN 466671-19-2 CAPLUS

CN Cyclohexanecarbonitrile, 1-[[{(R)-1-cyano-1-[(R)-4-(methoxyphenyl)sulfinyl]methyl}-2-[(trimethylsilyl)oxy]ethyl]amino]- (CA INDEX NAME)

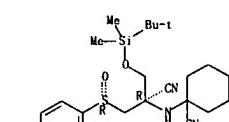
Absolute stereochemistry.



RN 466671-20-5 CAPLUS

CN Cyclohexanecarbonitrile, 1-[[{(R)-1-cyano-1-[(R)-4-(methoxyphenyl)sulfinyl]methyl}-2-[(trimethylsilyl)oxy]ethyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

## L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

374118-33-9P 374118-34-0P 374118-35-1P

374118-36-2P 374118-37-3P 374118-38-4P

374118-39-5P 374118-40-8P 374118-41-9P

374118-42-0P 374118-43-1P 374118-44-2P

374118-45-5P 374118-46-4P 374118-47-5P

374118-48-6P 374118-49-7P 374118-50-0P

374118-51-9P 374118-52-2P 374118-53-3P

374118-54-4P 374118-55-5P 374118-56-6P

374118-57-7P 374118-58-8P 374118-59-9P

374118-60-2P 374118-61-3P 374118-62-4P

374118-63-5P 374118-66-8P 374118-67-9P

374118-68-0P 374118-69-1P 374118-70-4P

374118-71-5P 374118-72-6P 374118-73-7P

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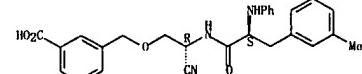
374118-80-2P 374118-81-7P 374118-82-8P

374118-83-9P 374118-84-0P 374118-85-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prep of N-substituted peptidyl nitriles as cysteine cathepsin inhibitors)

RN 374118-06-6 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(phenylamino)propyl]aminoethoxy)methyl]- (CA INDEX NAME)

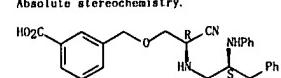
Absolute stereochemistry.



RN 374118-08-8 CAPLUS

CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-1-oxo-3-phenyl-2-(phenylamino)propyl]aminoethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-09-9 CAPLUS

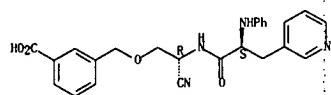
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-1-oxo-2-(phenylamino)-3-(3-pyridinyl)propyl]aminoethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 374118-31-7P 374118-32-8P 374118-33-9P

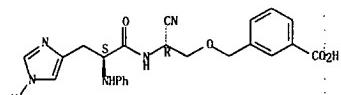
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-1-oxo-2-(phenylamino)-3-(3-pyridinyl)propyl]aminoethoxy)methyl]- (CA INDEX NAME)

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



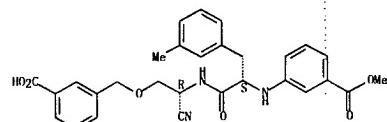
RN 374118-10-2 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(1-methyl-1H-imidazol-4-yl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-11-3 CAPLUS  
CN Benzoic acid, 3-[(1S)-2-[(1R)-2-[(3-carboxyphenyl)methoxy]-1-cyanoethyl]amino]-1-[(3-methylphenyl)methyl]-2-oxoethyl]amino-, 1-methyl ester (CA INDEX NAME)

Absolute stereochemistry.

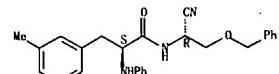


RN 374118-12-4 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-2-[(4-methylphenyl)amino]-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 $\alpha$ -(phenylamino)-, (dS)- (CA INDEX NAME)

Absolute stereochemistry.

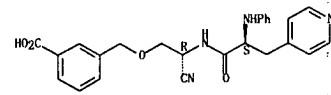


RN 374118-18-0 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-1-oxo-2-(phenylamino)-3-(4-pyridinyl)propyl]amino]ethoxy)methyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 374118-17-9  
CMF C25 H24 N4 O4

Absolute stereochemistry.



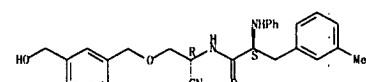
CM 2

CRN 76-05-1  
CMF C2 H F3 O2



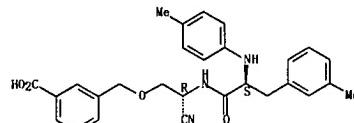
RN 374118-19-1 CAPLUS  
CN Benzenepropanamide, N-[(1R)-1-cyano-2-[(3-hydroxymethyl)phenyl]methoxy]ethyl]-3-methyl- (CA INDEX NAME)

Absolute stereochemistry.



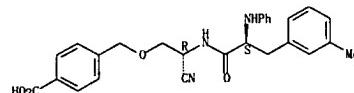
RN 374118-21-5 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-1-oxo-2-(phenylamino)-3-(IH-

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



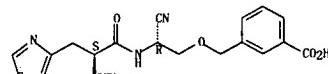
RN 374118-13-5 CAPLUS  
CN Benzoic acid, 4-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



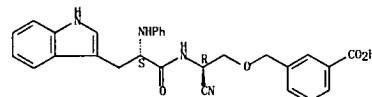
RN 374118-14-6 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-1-oxo-2-(phenylamino)-3-(4-thiazolyl)propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-15-7 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(1H-indol-3-yl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



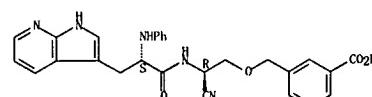
RN 374118-16-8 CAPLUS  
CN Benzenepropanamide, N-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]-3-methyl-

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
pyrrolo[2,3-b]pyridin-3-ylpropyl]amino]ethoxy)methyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 374118-20-4  
CMF C27 H25 N5 O4

Absolute stereochemistry.



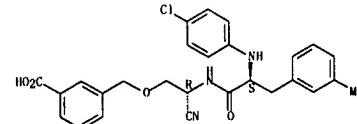
CM 2

CRN 76-05-1  
CMF C2 H F3 O2



RN 374118-22-6 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(4-chlorophenyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]-2-cyanoethoxy)methyl]- (CA INDEX NAME)

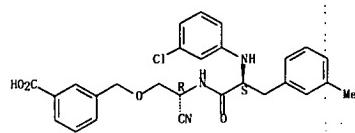
Absolute stereochemistry.



RN 374118-23-7 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(3-chlorophenyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]-2-cyanoethoxy)methyl]- (CA INDEX NAME)

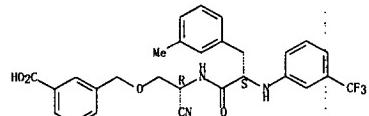
Absolute stereochemistry.

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



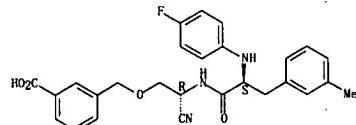
RN 374118-24-8 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)amino]propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-25-9 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-{(4-fluorophenyl)amino}-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-26-0 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-2-{(2-methylphenyl)amino}-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

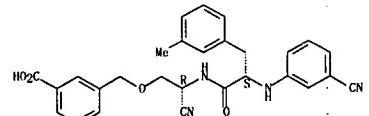
Absolute stereochemistry.

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



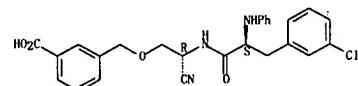
RN 374118-30-6 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-{(3-cyanophenyl)amino}-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



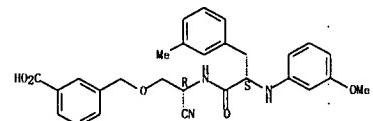
RN 374118-31-7 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-{[(2S)-3-(3-chlorophenyl)-1-oxopropyl]amino}-2-cyanoethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

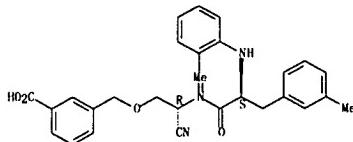


RN 374118-32-8 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-{(3-methoxyphenyl)amino}-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

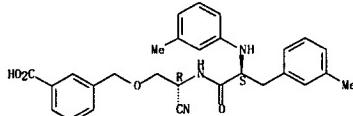


L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



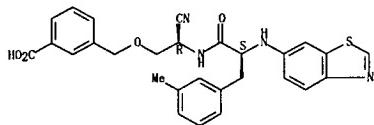
RN 374118-27-1 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)amino]ethoxy)methyl]-2-[(3-methylphenyl)amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-28-2 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-(6-benzothiazolylamino)-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



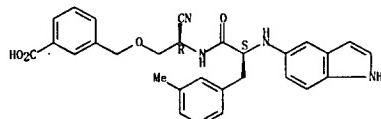
RN 374118-29-3 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-{(3,4-dichlorophenyl)amino}-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

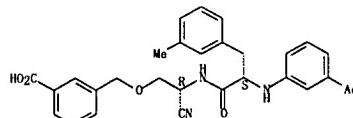
RN 374118-33-9 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-(1H-indol-5-ylamino)-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



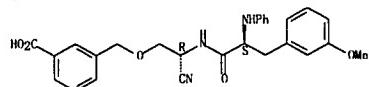
RN 374118-34-0 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-{(3-acetylphenyl)amino}-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-35-1 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methoxyphenyl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

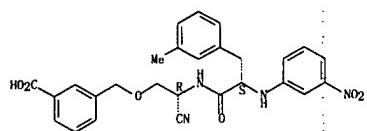
Absolute stereochemistry.



RN 374118-36-2 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-nitrophenyl)amino]-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



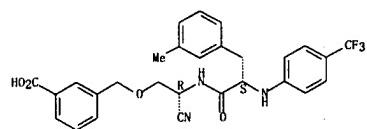
RN 374118-37-3 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(4-cyanophenyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]-(CA INDEX NAME)

Absolute stereochemistry.



RN 374118-38-4 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]-(CA INDEX NAME)

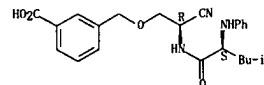
Absolute stereochemistry.



RN 374118-39-5 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-2-[(4-(methylsulfonyl)phenyl]amino]-1-oxopropyl]amino]ethoxy]methyl]-(CA INDEX NAME)

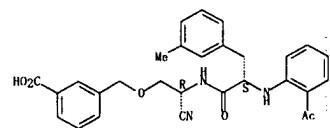
Absolute stereochemistry.

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



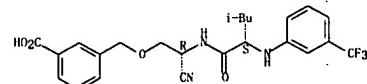
RN 374118-43-1 CAPLUS  
CN Benzoic acid, 3-[(2S)-2-[(2-acetylphenyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]2-cyanoethoxy]methyl]-(CA INDEX NAME)

Absolute stereochemistry.



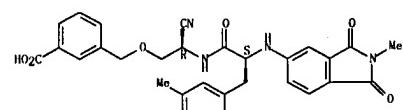
RN 374118-44-2 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-4-methyl-1-oxo-2-[(3-trifluoromethyl)phenyl]amino]pentyl]amino]ethoxy]methyl]-(CA INDEX NAME)

Absolute stereochemistry.



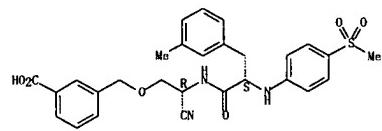
RN 374118-45-3 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2,3-dihydro-2-methyl-1,3-dioxo-1H-isindole-5-yl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]-(CA INDEX NAME)

Absolute stereochemistry.



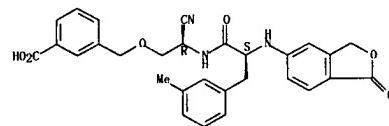
RN 374118-46-4 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2,3-dihydro-3-oxo-1H-inden-5-

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



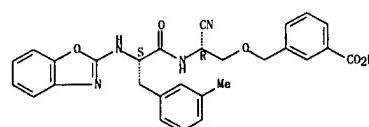
RN 374118-40-8 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(1,3-dihydro-1-oxo-5-isobenzofuran-2-yl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]-(CA INDEX NAME)

Absolute stereochemistry.



RN 374118-41-9 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-(2-benzoxazolylamino)-3-(3-methylphenyl)-1-oxopropyl]amino]2-cyanoethoxy]methyl]-(CA INDEX NAME)

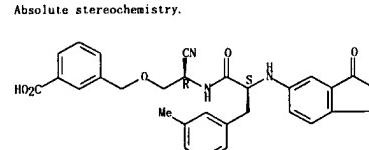
Absolute stereochemistry.



RN 374118-42-0 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-4-methyl-1-oxo-2-(phenylamino)pentyl]amino]ethoxy]methyl]-(CA INDEX NAME)

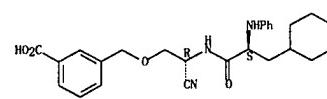
Absolute stereochemistry.

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



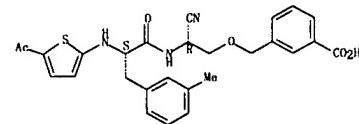
RN 374118-47-5 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-cyclohexyl-1-oxo-2-(phenylamino)propyl]amino]ethoxy]methyl]-(CA INDEX NAME)

Absolute stereochemistry.



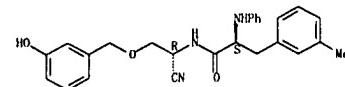
RN 374118-48-6 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(5-acetyl-2-thienyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]2-cyanoethoxy]methyl]-(CA INDEX NAME)

Absolute stereochemistry.



RN 374118-49-7 CAPLUS  
CN Benzenepropanamide, N-[(R)-1-cyano-2-[(3-hydroxyphenyl)methoxy]ethyl]-3-methyl-a-(phenylamino)-(uS)-(CA INDEX NAME)

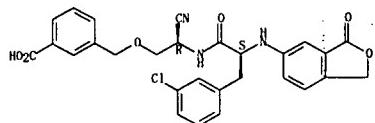
Absolute stereochemistry.



## L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

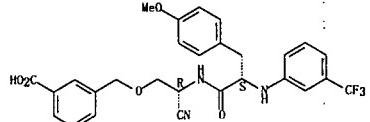
RN 374118-50-0 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-3-(3-chlorophenyl)-2-[(1,3-dihydro-3-oxo-5-isobenzofuryl)amino]-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



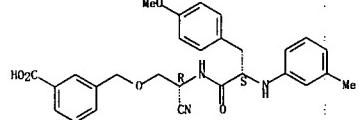
RN 374118-51-1 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(4-methoxyphenyl)-1-oxo-2-[(3-trifluoromethyl)phenyl]amino]propyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-52-2 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(4-methoxyphenyl)-2-[(3-methylphenyl)amino]-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

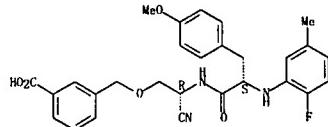
Absolute stereochemistry.



RN 374118-53-3 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2-fluoro-5-methylphenyl)amino]-3-(4-methoxyphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

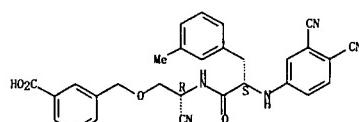
## L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

Absolute stereochemistry.



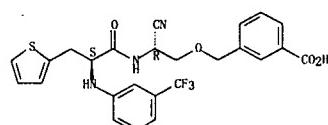
RN 374118-54-4 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(3,4-dicyanophenyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-55-5 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-1-oxo-3-(2-thienyl)-2-[(3-(trifluoromethyl)phenyl)amino]propyl]amino]ethoxy]methyl]- (CA INDEX NAME)

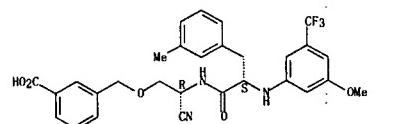
Absolute stereochemistry.



RN 374118-56-6 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(3-methoxy-5-(trifluoromethyl)phenyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

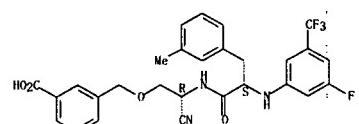
Absolute stereochemistry.

## L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



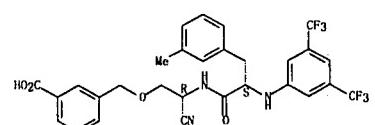
RN 374118-57-7 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(3-fluoro-5-(trifluoromethyl)phenyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-58-8 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(3,5-bis(trifluoromethyl)phenyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

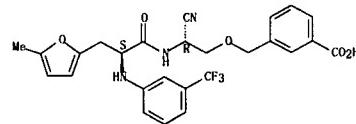
Absolute stereochemistry.



RN 374118-59-9 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(5-methyl-2-furanyl)-1-oxo-2-[(3-(trifluoromethyl)phenyl)amino]propyl]amino]ethoxy]methyl]- (CA INDEX NAME)

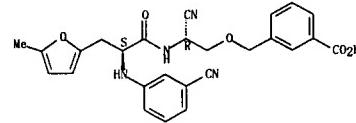
Absolute stereochemistry.

## L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



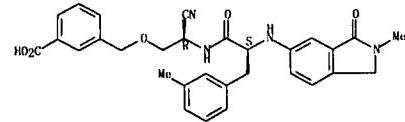
RN 374118-60-2 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(3-cyanophenyl)amino]-3-(5-methyl-2-furanyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-61-3 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2,3-dihydro-2-methyl-3-oxo-5H-isindol-5-yl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

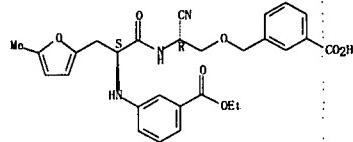
Absolute stereochemistry.



RN 374118-62-4 CAPLUS  
 CN Benzoic acid, 3-[(1S)-2-[(1R)-2-[(3-carboxyphenyl)methoxy]-2-cyanoethyl]amino]-[(5-methyl-2-furanyl)methyl]-2-oxoethyl]amino]-1-oxethyl ester (CA INDEX NAME)

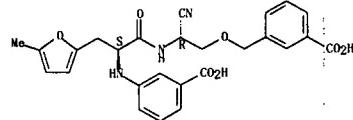
Absolute stereochemistry.

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



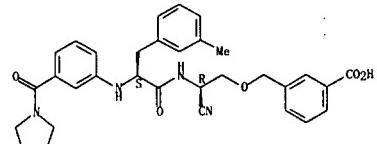
RN 374118-63-5 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(3-carboxyphenyl)amino]-3-(5-methyl)-2-furanyl]-1-oxopropyl]amino]-2-cyanoethoxy[methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-66-8 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(3-(1-pyrrolidinylcarbonyl)phenyl)amino]propyl]amino]ethoxy[methyl]- (CA INDEX NAME)

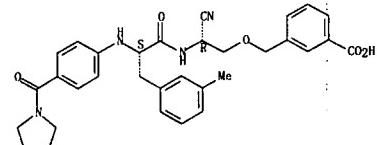
Absolute stereochemistry.



RN 374118-67-9 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(3-(dimethylamino)carbonyl)phenyl]amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy[methyl]- (CA INDEX NAME)

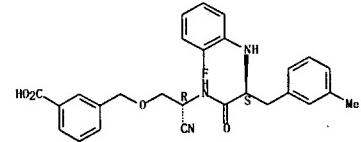
Absolute stereochemistry.

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



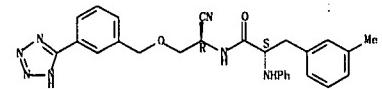
RN 374118-71-5 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2-f)uorophenyl]amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy[methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-72-6 CAPLUS  
CN Benzenepropanamide, N-[(1R)-1-cyano-2-[(3-(1H-tetrazol-5-yl)phenyl)methoxyethyl]-3-methyl- $\omega$ -(phenylamino)-, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

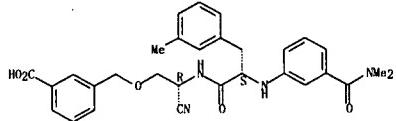
Absolute stereochemistry.



RN 374118-73-7 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(1,3-dihydro-3-oxo-5-isobenzofuranyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy[methyl]- (CA INDEX NAME)

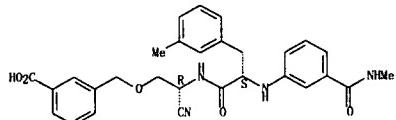
Absolute stereochemistry.

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



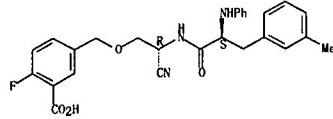
RN 374118-68-0 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(3-[(ethylamino)carbonyl]phenyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy[methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-69-1 CAPLUS  
CN Benzoic acid, 5-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy[methyl]-2-fluoro- (CA INDEX NAME)

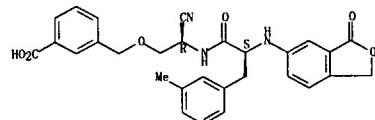
Absolute stereochemistry.



RN 374118-70-4 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(4-(1-pyrrolidinylcarbonyl)phenyl)amino]propyl]amino]ethoxy[methyl]- (CA INDEX NAME)

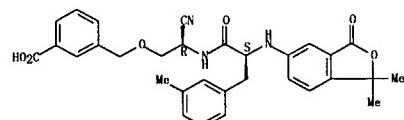
Absolute stereochemistry.

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



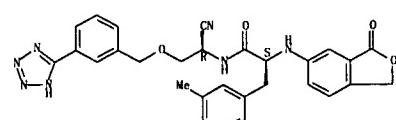
RN 374118-74-8 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(1,3-dihydro-1,1-dimethyl-3-oxo-5-isobenzofuranyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy[methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-75-9 CAPLUS  
CN Benzenepropanamide, N-[(1R)-1-cyano-2-[(3-(1H-tetrazol-5-yl)phenyl)methoxyethyl]- $\alpha$ -[(1,3-dihydro-3-oxo-5-isobenzofuranyl)amino]-3-methyl-, ( $\alpha$ S)- (9CI) (CA INDEX NAME)

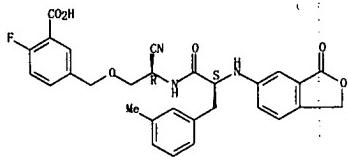
Absolute stereochemistry.



RN 374118-76-0 CAPLUS  
CN Benzoic acid, 5-[(2R)-2-cyano-2-[(2S)-2-[(1,3-dihydro-3-oxo-5-isobenzofuranyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy[methyl]-2-fluoro- (CA INDEX NAME)

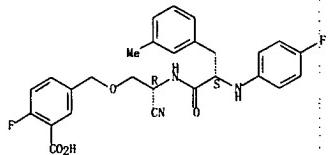
Absolute stereochemistry.

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



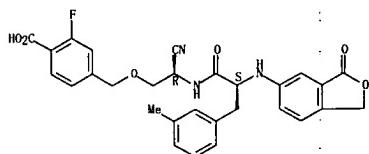
RN 374118-77-1 CAPLUS  
CN Benzoic acid, 5-[(2R)-2-cyano-2-[(2S)-2-[(4-fluorophenyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]-2-fluoro- (CA INDEX NAME)

Absolute stereochemistry.



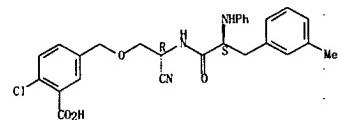
RN 374118-78-2 CAPLUS  
CN Benzoic acid, 4-[(2R)-2-cyano-2-[(2S)-2-[(1,3-dihydro-3-oxo-5-isobenzofuranyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]-2-fluoro- (CA INDEX NAME)

Absolute stereochemistry.



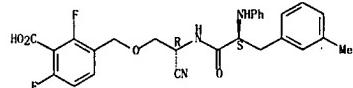
RN 374118-79-3 CAPLUS  
CN Benzoic acid, 4-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy)methyl]-2-fluoro- (CA INDEX NAME)

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



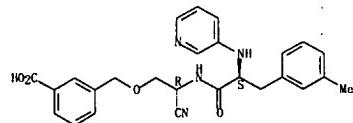
RN 374118-83-9 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy)methyl]-2,6-difluoro- (CA INDEX NAME)

Absolute stereochemistry.



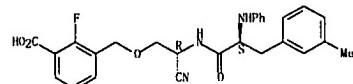
RN 374118-84-0 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(3-pyridinylamino)propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

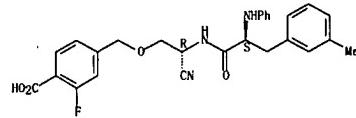


RN 374118-85-1 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy)methyl]-2-fluoro- (CA INDEX NAME)

Absolute stereochemistry.

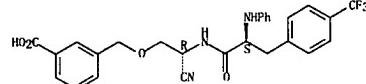


RN 374118-63-8 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(1-(phenylamino)cyclohexyl)carbonyl]amino]ethoxy)methyl]- (CA INDEX NAME)

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
Absolute stereochemistry.

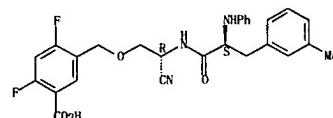
RN 374118-80-6 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-1-oxo-2-(phenylamino)-3-(4-(trifluoromethyl)phenyl)propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



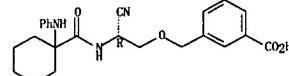
RN 374118-81-7 CAPLUS  
CN Benzoic acid, 5-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy)methyl]-2,4-difluoro- (CA INDEX NAME)

Absolute stereochemistry.



RN 374118-82-8 CAPLUS  
CN Benzoic acid, 2-chloro-5-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

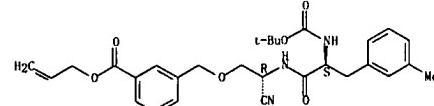
L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
Absolute stereochemistry.

IT 225122-60-1P 225122-61-2P 374119-18-3P  
374119-19-4P 374119-20-7P 374119-23-0P  
374119-24-1P 374119-25-2P 374119-26-3P  
374119-29-6P 374119-44-5P 374119-45-6P  
374119-46-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Preparation of N-substituted peptidyl nitriles as cysteine cathepsin inhibitors)

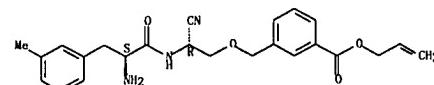
RN 225122-60-1 CAPLUS  
CN Benzoic acid, 3-[(2R)-7S)-4-cyano-11,11-dimethyl-7-[(3-methylphenyl)methyl]-6,9-dioxo-10-dioxa-5,8-diazadodec-1-yl]-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 225122-61-2 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-amino-3-(3-methylphenyl)-1-oxopropyl]amino]-2-cyano-2-hydroxy-2-propenyl ester (9CI) (CA INDEX NAME)

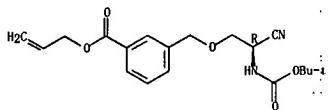
Absolute stereochemistry.



RN 374119-18-3 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(1,1-dimethylethoxy)carbonyl]amino]ethoxy)methyl]-, 2-propenyl ester (9CI) (CA INDEX NAME)

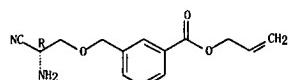
Absolute stereochemistry.

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



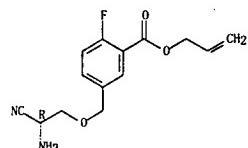
RN 374119-19-4 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-amino-2-cyanoethoxy]methyl-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



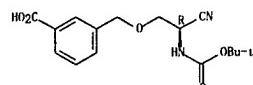
RN 374119-20-7 CAPLUS  
 CN Benzoic acid, 5-[(2R)-2-amino-2-cyanoethoxy]methyl]-2-fluoro-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



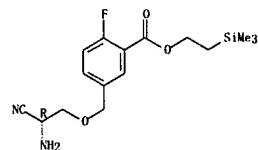
RN 374119-23-0 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(1,1-dimethylethoxy)carbonyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



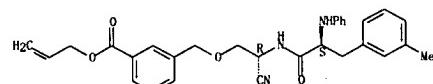
RN 374119-24-1 CAPLUS  
 CN Carbamic acid, [(1R)-1-cyano-2-[(3-[(2-cyanoethyl)amino]carbonyl)phenyl]methyl-

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



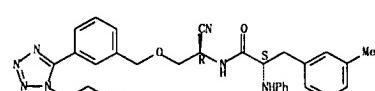
RN 374119-44-5 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy)methyl]-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



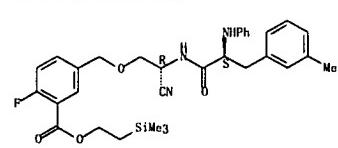
RN 374119-45-6 CAPLUS  
 CN Benzenepropanamide, N-[(1R)-1-cyano-2-[(3-[(2-cyanoethyl)-1H-tetrazol-5-yl]phenyl)methoxy]ethyl]-3-methyl-u-(phenylamino)-, (uS)- (CA INDEX NAME)

Absolute stereochemistry.

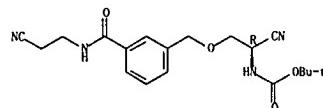


RN 374119-46-7 CAPLUS  
 CN Benzoic acid, 5-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(phenylamino)propyl]amino]ethoxy)methyl]-2-fluoro-, 2-(trimethylsilyl)ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

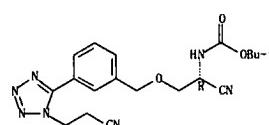
L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 ethoxyethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



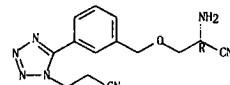
RN 374119-25-2 CAPLUS  
 CN Carbamic acid, [(1R)-1-cyano-2-[(3-[(2-cyanoethyl)-1H-tetrazol-5-yl]phenyl)methoxy]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 374119-26-3 CAPLUS  
 CN 1H-Tetrazole-1-propanenitrile, 5-[(3-[(2R)-2-amino-2-cyanoethoxy)methyl]phenyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 374119-29-6 CAPLUS  
 CN Benzoic acid, 5-[(2R)-2-amino-2-cyanoethoxy)methyl]-2-fluoro-, 2-(trimethylsilyl)ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

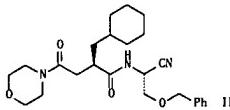
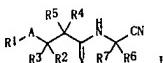
L4 ANSWER 39 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2001-833854 CAPLUS  
 DOCUMENT NUMBER: 135:371749  
 TITLE: Preparation of succinic acid diamides as cysteine protease inhibitors  
 INVENTOR(S): Bekkali, Younes; Beijgeri, Rajashehar; Emmanuel, Michel Jose; Hickey, Eugene Richard; Liu, Weimin; Patel, Usha R.; Spero, Denise Mary; Thomson, David S.; Ward, Yancey David; Young, Erick Richard Roush  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 75 pp., Cont.-in-part of U.S.  
 Ser. No. 627,869.  
 CODEN: USXCCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACT. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001041700	A1	20011115	US: 2001-862674	20010522
US 6313117	B1	20011106	US: 2000-627869	20000728
US 2003087939	A1	20030508	US: 2002-278546	20021023
US 6649642	B2	20031118		

PRIORITY APPLN. INFO.: US: 1999-146647P P 19990730  
 US: 2000-627869 A2 20000728  
 US: 2001-862674 A1 20010522

OTHER SOURCE(S): MARPAT 135:371749

GRAPHIC IMAGE:



**ABSTRACT:**  
 Title compds. [I]: A = CO, R80CH: R1 = (substituted) alkyl, cycloalkyl, aryl, heterocyclic, heteroaromatic, amino; R2 = H, alkyl, OH, alkoxy; R3, R4 = H, alkyl; R5 = H, alkyl, cycloalkyl, aryl, heterocyclic; R6 = H, alkyl, optionally interrupted by 1-2 N, O, S, cycloalkyl, aryl, heterocyclic, aryl, heteroaryl, cyano; R6R7 = atoms to form a 4-7 membered heterocyclic or carbocyclic ring; R8 = H, alkyl, cycloalkyl, cycloalkylalkyl, aralkyl; X = O, S), were prepared as inhibitors of cysteine proteases such as cathepsins B, F, K, L, and S in the treatment of autoimmune diseases, Alzheimer's disease, and atherosclerosis. Thus, (R)-2-cyclohexylmethyl-4-morpholin-4-yl-4-oxobutyric acid (prepn. given) in DMF at 0° was treated with EDC, 1-hydroxybenzotriazole, O-benzyl-L-serinamide, HCl, and N-methylmorpholine followed by stirring overnight to give N-(2-benzyloxy-1-carbamoylethyl)-2-cyclohexylmethyl-4-morpholin-4-oxobutyramide. The latter was stirred 1 h with cyanuric chloride in DMF at 0° to give title compd. (II). It inhibited cathepsin S with IC50s of 100 μM.

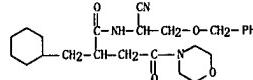
L4 ANSWER 39 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 autoimmune diseases, Alzheimer's disease, and atherosclerosis. Thus, (R)-2-cyclohexylmethyl-4-morpholin-4-yl-4-oxobutyric acid (prepn. given) in DMF at 0° was treated with EDC, 1-hydroxybenzotriazole, O-benzyl-L-serinamide, HCl, and N-methylmorpholine followed by stirring overnight to give N-(2-benzyloxy-1-carbamoylethyl)-2-cyclohexylmethyl-4-morpholin-4-oxobutyramide. The latter was stirred 1 h with cyanuric chloride in DMF at 0° to give title compd. (II). It inhibited cathepsin S with IC50s of 100 μM.

IT 324793-52-4P 324793-54-6P 324794-49-2P  
 324794-53-8P 324794-57-2P 324794-60-7P  
 324794-97-0P 324795-09-7P 324795-10-0P  
 324795-11-1P 324795-22-4P 324795-30-4P  
 324795-31-5P

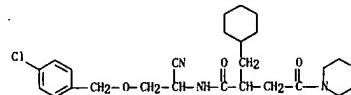
RL (BAC) (biological activity or effector, except adverse): BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIO (Biological study); PREP (Preparation); USES (Uses)

(preparation of succinic acid diamides as inhibitors of cysteine proteases (cathepsins) in the treatment of autoimmune diseases, Alzheimer's disease, and atherosclerosis)

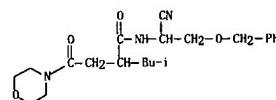
RN 324793-52-4 CAPLUS  
 CN 4-Morpholinebutanamide, N-[1-cyano-2-(phenylmethoxy)ethyl]-α-(cyclohexylmethyl)-γ-oxo- (CA INDEX NAME)



RN 324793-54-6 CAPLUS  
 CN 4-Morpholinebutanamide, N-[2-[4-chlorophenyl]methoxy]-1-cyanoethyl-α-(cyclohexylmethyl)-γ-oxo- (CA INDEX NAME)

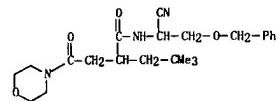


RN 324794-49-2 CAPLUS  
 CN 4-Morpholinebutanamide, N-[1-cyano-2-(phenylmethoxy)ethyl]-α-(2-methylpropyl)-γ-oxo- (CA INDEX NAME)

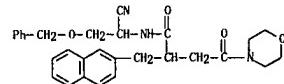


L4 ANSWER 39 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

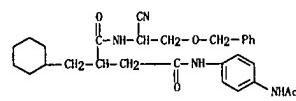
RN 324794-53-8 CAPLUS  
 CN 4-Morpholinebutanamide, N-[1-cyano-2-(phenylmethoxy)ethyl]-α-(2-naphthalenylmethyl)-γ-oxo- (CA INDEX NAME)



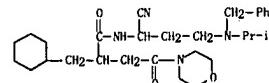
RN 324794-57-2 CAPLUS  
 CN 4-Morpholinebutanamide, N-[1-cyano-2-(phenylmethoxy)ethyl]-α-(2-naphthalenylmethyl)-γ-oxo- (CA INDEX NAME)



RN 324794-60-7 CAPLUS  
 CN Butanediamide, N-[4-(acetylamino)phenyl]-N-[1-cyano-2-(phenylmethoxy)ethyl]-2-(cyclohexylmethyl)- (CA INDEX NAME)



RN 324794-97-0 CAPLUS  
 CN 4-Morpholinebutanamide, N-[1-cyano-3-[(1-methyl)ethyl](phenylmethyl)amino]propyl)-α-(cyclohexylmethyl)-γ-oxo- (CA INDEX NAME)



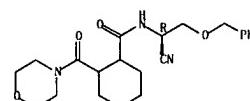
RN 324795-09-7 CAPLUS  
 CN 4-Morpholinebutanamide, N-[1-(1-cyano-2-(phenylmethoxy)ethyl)-4-(cyclohexylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 39 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

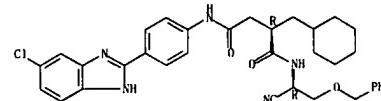
RN 324795-10-0 CAPLUS  
 CN Cyclohexanecarboxamide, N-[1(R)-1-cyano-2-(phenylmethoxy)ethyl]-2-(4-morpholinylcarbonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 324795-11-1 CAPLUS  
 CN Butanediamide, N-[4-(5-chloro-1H-benzimidazol-2-yl)phenyl]-N-[1-(1-cyano-2-(phenylmethoxy)ethyl)-2-(cyclohexylmethyl)]-, (2R)-(9CI) (CA INDEX NAME)

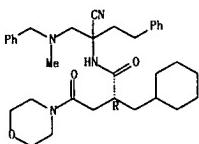
Absolute stereochemistry.



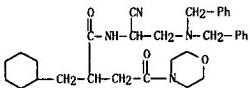
RN 324795-22-4 CAPLUS  
 CN 4-Morpholinebutanamide, N-[1-(1-cyano-1-[(methyl(phenyl)methyl)amino]methyl)-3-(phenylpropyl)-α-(cyclohexylmethyl)-γ-oxo-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 39 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

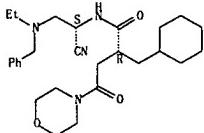


RN 324795-30-4 CAPLUS  
CN 4-Morpholinebutanamide, N-[2-[bis(phenylmethyl)amino]-1-cyanoethyl]-  
α-(cyclohexylmethyl)-γ-oxo-, (aR)- (CA INDEX NAME)



RN 324795-31-5 CAPLUS  
CN 4-Morpholinebutanamide, N-[1S)-1-cyano-2-[(ethyl(phenylmethyl)amino)ethyl]-  
α-(cyclohexylmethyl)-γ-oxo-, (aR)- (CA INDEX NAME)

Absolute stereochemistry.



IT 324795-65-5  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
Abstract: Preparation of succinimide diamides as inhibitors of cysteine proteases (cathepsins) in the treatment of autoimmune diseases, Alzheimer's disease, and atherosclerosis)  
RN 324795-65-5 CAPLUS  
CN Benzenebutanenitrile, ω-amino-ω-[[[methyl(phenylmethyl)amino]methoxy] (CA INDEX NAME)

L4 ANSWER 40 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001-823645 CAPLUS

DOCUMENT NUMBER: 136-95585

TITLE: Identification of Dipeptidyl Nitriles as Potent and Selective Inhibitors of Cathepsin B through Structure-Based Drug Design

AUTHOR(S): Greenspan, Paul D.; Clark, Kirk L.; Tommasi, Ruben A.; Cowen, Scott D.; McQuire, Leslie W.; Farley, David L.; van Duzer, John H.; Goldberg, Ronald L.; Zhou, Hu; Huanghai; Du, Zhengming; Pitt, John J.; Coppa, David E.; Fang, Zheng; Macchia, William; Zhu, Liqian; Capparelli, Michael P.; Goldstein, Robert; Wigz, Andrew M.; Dougherty, John R.; Bohacek, Regine S.; Knap, Alan K.

CORPORATE SOURCE: Arthur D. Little and Novartis Metabolism Research, Novartis Pharmaceuticals Corporation, Summit, NJ, 07901, USA

SOURCE: Journal of Medicinal Chemistry (2001), 44(26), 4524-4534

CODEN: JMCAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:

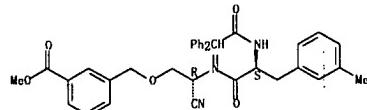
Cathepsin B is a member of the papain superfamily of cysteine proteases and has been implicated in the pathol. of numerous diseases, including arthritis and cancer. As part of an effort to identify potent, reversible inhibitors of this protease, we examined a series of dipeptidyl nitriles, starting with the previously Cbz-Phe-NH-CH2C(=O)Ph. Several modifications of the nitrile, x-ray crystallog. data, and molecular models were used to optimize the P1, P2, and P3 substituents of this template. Cathepsin B is unique in its class in that it contains a carboxylate recognition site in the S2' pocket of the active site. Inhibitor potency and selectivity were enhanced by tethering a carboxylate functionality from the carbon α to the nitrile to interact with this region of the enzyme. This resulted in the identification of a compound, a 7 nM inhibitor of cathepsin B, with excellent selectivity over other cysteine cathepsins.

IT 225121-05-1P 225121-06-2P 225121-17-5P  
225121-87-9P 225122-18-9P 389600-13-9P  
389600-14-0P 389600-15-1P 389600-17-3P  
389600-18-4P 389600-19-5P 389600-20-8P  
389600-21-9P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIO (Biological study); PREP (Preparation); USES (Uses); (preparation of dipeptidyl nitriles as potent and selective inhibitors of cathepsin B through structure-based drug design)

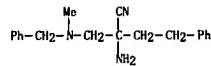
RN 225121-05-1 CAPLUS

CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(diphenylacetyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



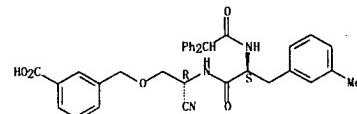
L4 ANSWER 39 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



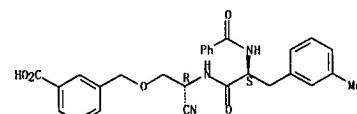
L4 ANSWER 40 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 225121-06-2 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(diphenylacetyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (9CI) (CA INDEX NAME)

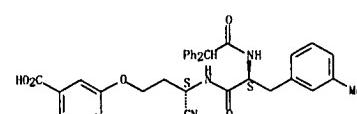
Absolute stereochemistry.

RN 225121-17-5 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-(benzoylamino)-3-(3-methylphenyl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

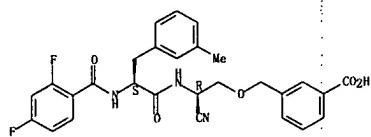
RN 225121-87-9 CAPLUS  
CN Benzoic acid, 3-[(3S)-3-cyano-3-[(2S)-2-[(diphenylacetyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]propoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 225122-18-9 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2,4-difluorobenzoyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

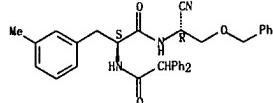
Absolute stereochemistry.

L4 ANSWER 40 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



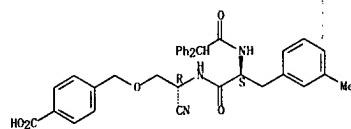
RN 389600-13-9 CAPLUS  
CN Benzenepropanamide, N-[{(1R)-1-cyano-2-(phenylmethoxy)ethyl}-3-methyl-, (uS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 389600-14-0 CAPLUS  
CN Benzoic acid, 4-[(2R)-2-cyano-2-[(2S)-2-[(diphenylacetyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl- (9CI) (CA INDEX NAME)

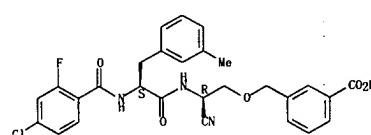
Absolute stereochemistry.



RN 389600-15-1 CAPLUS  
CN Benzenepropanamide, N-[(1R)-1-cyano-2-[(3-(hydroxymethyl)phenyl)methoxy]ethyl]-a-[(diphenylacetyl)amino]-3-methyl-, (GS)- (9CI) (CA INDEX NAME)

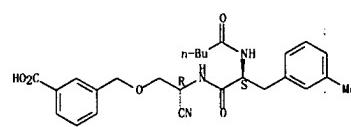
Absolute stereochemistry.

L4 ANSWER 40 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



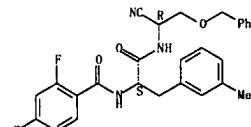
RN 389600-20-8 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(1-oxopentyl)amino]propylamino]ethoxy]methyl- (CA INDEX NAME)

Absolute stereochemistry.



RN 389600-21-9 CAPLUS  
CN Benzenepropanamide, N-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]-u-[(2,4-difluorobenzoyl)amino]-3-methyl-, (uS)- (CA INDEX NAME)

Absolute stereochemistry.

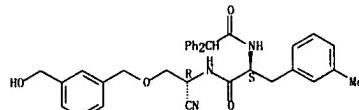


IT 225122-60-1P 225122-61-2P 225122-64-5P  
374119-18-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of dipeptidyl nitriles as potent and selective inhibitors of cathepsin B through structure-based drug design)

RN 225122-60-1 CAPLUS  
CN Benzoic acid, 3-[(4R,7S)-4-cyano-11,11-dimethyl-7-[(3-methylphenyl)methyl]-6,9-dioxo-2,10-dioxa-5,8-diazadodec-11-yl]-, 2-propenyl ester (9CI) (CA INDEX NAME)

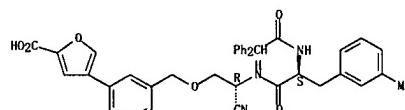
Absolute stereochemistry.

L4 ANSWER 40 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



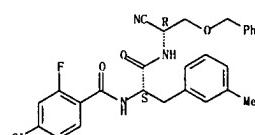
RN 389600-17-3 CAPLUS  
CN 2-furan carboxylic acid, 4-[(2R)-2-cyano-2-[(2S)-2-[(diphenylacetyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 389600-18-4 CAPLUS  
CN Benzenepropanamide, u-[(4-chloro-2-fluorobenzoyl)amino]-N-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]-3-methyl-, (uS)- (CA INDEX NAME)

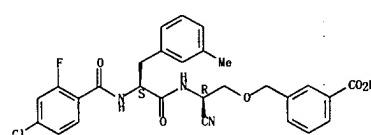
Absolute stereochemistry.



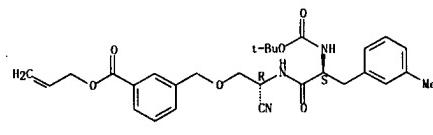
RN 389600-19-5 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(4-chloro-2-fluorobenzoyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 40 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

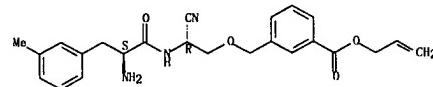


L4 ANSWER 40 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

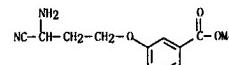


RN 225122-61-2 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-amino-3-(3-methylphenyl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

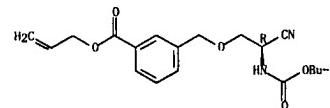


RN 225122-64-5 CAPLUS  
CN Benzoic acid, 3-(3-amino-3-cyanopropoxy)-, methyl ester (CA INDEX NAME)



RN 374119-18-3 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(1,1-dimethylethoxy)carbonyl]amino]ethoxy]methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

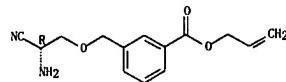


IT 374119-19-4P 389600-22-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of dipeptidyl nitriles as potent and selective inhibitors of cathepsin B through structure-based drug design)

RN 374119-19-4 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-amino-2-cyanoethoxy]methyl-, 2-propenyl ester (9CI) (CA INDEX NAME)

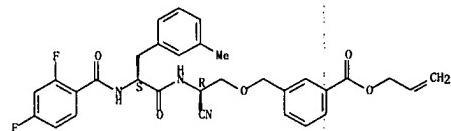
Absolute stereochemistry.

L4 ANSWER 40 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 389600-22-0 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2,4-difluorobenzoyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl-, 2-propenyl ester (9C1)  
(CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 41 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

ACCESSION NUMBER: 2001:746581 CAPLUS  
DOCUMENT NUMBER: 136:167154  
TITLE:  $\alpha$ -Alkyl- $\omega$ -amino- $\beta$ -sulfonyl hydroxamates as potent MMP inhibitors that spare MMP-1

Becker, D. P.; DeCrescenzo, G.; Freskos, J.; Getman, D. P.; Hockerman, S. L.; Li, M.; Mehta, P.; Munie, G.

E.; Swerling, C.

Research and Development, Departments of Medicinal Chemistry and Inflammation-Oncology, Pharmacia,

Kankakee, IL 60031 USA

Bischoff, K. &amp; Medicinal Chemistry Letters (2001).

CODEN: BMCLB8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 136:167154

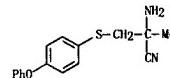
## ABSTRACT:

A series of  $\alpha$ -alkyl- $\omega$ -amino- $\beta$ -sulfonyl hydroxamates HONICCR1 (NR2R3)CH2S02C6H4XPh-4 [R1 = Me, R2 = H, Ac, Me, Et, CH2Ph, CH2CH2Ph, 3,4-methylenedioxybenzyl, 2-naphthylmethyl, propargyl, pyrrolidinacetyl, R3 = H, X = O; R1 = Me, R2 = H, Ac, R3 = H, X = S; R1 = Ph, R2 = Bz, R3 = H, X = O; R1R2 = (CH2)3, R3 = propargyl, X = O] was prepared and evaluated for potency vs. MMP-2 and MMP-13, and for selectivity vs. MMP-1. Low nanomolar potency was obtained with selectivity vs. MMP-1 ranging from  $>10$  to  $>1000$ . Selected compds. were orally bioavailable.

IT 397330-25-SP

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation): RACT (Reactant or reagent);  $\alpha$ -alkyl- $\omega$ -amino- $\beta$ -sulfonyl hydroxamates as potent MMP inhibitors that spare MMP-1

RN 397330-25-5 CAPLUS  
CN Propanenitrile, 2-amino-2-methyl-3-[(4-phenoxyphenyl)thio]- (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 42 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

ACCESSION NUMBER: 2001:101117 CAPLUS

DOCUMENT NUMBER: 134:163044

TITLE: Preparation of succinic acid diimides as cysteine protease inhibitors

INVENTOR(S): Bekkali, Younes; Betageri, Raj; Emmanuel, Michel; Hickey, Eugene; Liu, Weimin; Spero, Denise M.; Thomson, David S.; Ward, Yancey; Young, Erick R. R.; Patel, Usha

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 221 pp.

DOCUMENT TYPE: Patent

LANGUAGE: English

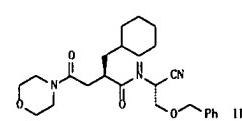
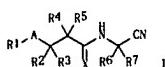
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001009110	A1	20010208	WO 2000-US20453	20000728
W: CA, JP, MX RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2379747	A1	20010208	CA 2000-2379747	20000728
EP 1204652	A1	20020515	EP 2000-950777	20000728
EP 1204652 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, PL, CY, AL JP 20035364 AT 2006015 ES 2284937 MX 2002PA01014	B1	20060517	US 1999-146647P	P 19990730
PRIORITY APPLN. INFO.: MARPAT 134:163044			WO 2000-US20453	W 20000728

OTHER SOURCE(S): MARPAT 134:163044

GRAPHIC IMAGE:



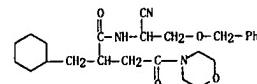
ABSTRACT:  
Title compds. (I): A = CO, R8OCH; R1 = (substituted) alkyl, cyclononyl, aryl, heterocycl, heteroaryl, amino; R2 = H, alkyl; OH, alkoxy; R3, R4 = H, alkyl; R5 = H, alkyl, cyclononyl, aryl, heterocycl, heteroaryl; R6 = H, alkyl; optionally interrupted by 1-2 N, O, S; R7 = H, alkyl, alkyl interrupted by 1-2 N, O, S; cycloalkyl, aryl, heterocycl, aryl, heteroaryl, cyano; R6R7 = atoms

L4 ANSWER 42 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
to form a 4-7 membered heterocyclic or carbocyclic ring; R8 = H, alkyl, cycloalkyl, cycloalkylalkyl, aralkyl; X = O, S), were prepd. s inhibitors of cysteine proteases such as cathepsins B, F, K, L, and S in the treatment of autoimmune diseases, Alzheimer's disease, and atherosclerosis. Thus, (R)-2-cyclohexylmethyl-4-morpholin-4-yl-4-oxobutyril acid (compn. given) in DMF at 0° was treated with EDC, 1-hydrobenzotetrazole (OBzT), 4-methyl-L-serinal, and N-methylmorpholin-4-yl-2-cyclohexylmethyl-4-morpholin-4-ylbenzotetrahydro-1H-1,2-dihydroimidazol-2-yl-2-cyclohexylmethyl-4-morpholin-4-ylbenzotetrahydronaphthalene. The latter was stirred 1 h with cyanuric chloride in DMF at 0° to give title compd. (II). I inhibited cathepsin S with IC50s of 100  $\mu$ M.

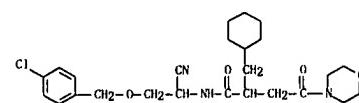
IT 324793-52-4P 324793-54-6P 324794-49-2P  
324794-53-8P 324794-57-2P 324794-60-7P  
324794-97-0P 324795-09-7P 324795-10-0P  
324795-11-1P 324795-22-4P 324795-30-4P  
324795-31-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIDL (Biological study); PREP (Preparation); USES (Uses); (preparation of succinic acid diimides as inhibitors of cysteine proteases (cathepsins) in the treatment of autoimmune diseases, Alzheimer's disease, and atherosclerosis)

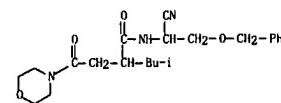
RN 324793-52- CAPLUS  
CN 4-Morpholinobutanamide, N-[1-cyano-2-(phenylmethoxyethyl)- $\omega$ -(cyclohexylmethyl)- $\gamma$ -oxo- (CA INDEX NAME)



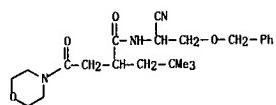
RN 324793-54-6 CAPLUS  
CN 4-Morpholinobutanamide, N-[2-[(4-chlorophenyl)methoxy]-1-cyanoethyl]- $\omega$ -(cyclohexylmethyl)- $\gamma$ -oxo- (CA INDEX NAME)



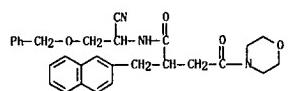
RN 324794-49-2 CAPLUS  
CN 4-Morpholinobutanamide, N-[1-cyano-2-(phenylmethoxyethyl)- $\omega$ -(2-methylpropyl)- $\gamma$ -oxo- (CA INDEX NAME)



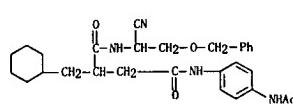
L4 ANSWER 42 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 RN 324794-53-8 CAPLUS  
 CN 4-Morpholinobutananide, N-[1-cyano-2-(phenylmethoxy)ethyl]- $\alpha$ -(2,2-dimethylpropyl)- $\gamma$ -oxo- (CA INDEX NAME)



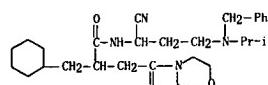
RN 324794-57-2 CAPLUS  
 CN 4-Morpholinobutananide, N-[1-cyano-2-(phenylmethoxy)ethyl]- $\alpha$ -(2-naphthalenylmethyl)- $\gamma$ -oxo- (CA INDEX NAME)



RN 324794-60-7 CAPLUS  
 CN Butanediamide, N-[4-(acetylaminophenyl)]-N-[1-cyano-2-(phenylmethoxyethyl)-2-(cyclohexylmethyl)]- (CA INDEX NAME)



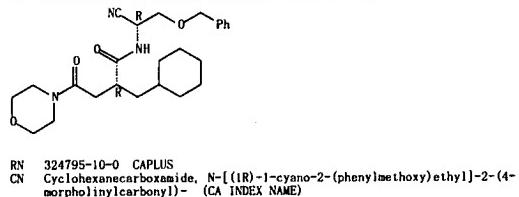
RN 324794-97-0 CAPLUS  
 CN 4-Morpholinobutananide, N-[1-cyano-3-[(1-methylethyl)(phenylmethyl)amino]propyl]- $\alpha$ -(cyclohexylmethyl)- $\gamma$ -oxo- (CA INDEX NAME)



RN 324795-09-7 CAPLUS  
 CN 4-Morpholinobutananide, N-[{(IR)-1-cyano-2-(phenylmethoxyethyl)}- $\alpha$ -(cyclohexylmethyl)- $\gamma$ -oxo-, (OR)- (CA INDEX NAME)

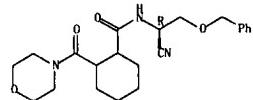
Absolute stereochemistry.

L4 ANSWER 42 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



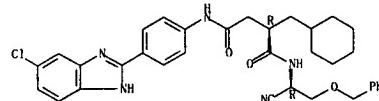
RN 324795-10-0 CAPLUS  
 CN Cyclohexanecarboxamide, N-[(IR)-1-cyano-2-(phenylmethoxyethyl)-2-(4-morpholinylcarbonyl)]- (CA INDEX NAME)

Absolute stereochemistry.



RN 324795-11-1 CAPLUS  
 CN Butanediamide, N-[4-(5-chloro-1H-benzimidazo-2-yl)phenyl]-N-{(IR)-1-cyano-2-(phenylmethoxyethyl)-2-(cyclohexylmethyl)}- (2R)-(9CI) (CA INDEX NAME)

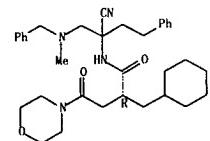
Absolute stereochemistry.



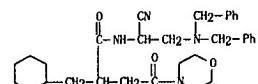
RN 324795-22-4 CAPLUS  
 CN 4-Morpholinobutananide, N-[1-cyano-1-[(methyl)(phenylmethyl)amino]methyl]- $\alpha$ -(phenylmethyl)- $\gamma$ -oxo-, (aR)- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 42 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

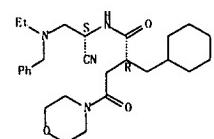


RN 324795-30-4 CAPLUS  
 CN 4-Morpholinobutananide, N-[2-(bis(phenylmethyl)amino)-1-cyanoethyl]- $\alpha$ -(cyclohexylmethyl)- $\gamma$ -oxo- (CA INDEX NAME)



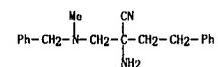
RN 324795-31-5 CAPLUS  
 CN 4-Morpholinobutananide, N-[(S)-1-cyano-2-[(ethyl)(phenylmethyl)amino]ethyl]- $\alpha$ -(cyclohexylmethyl)- $\gamma$ -oxo-, (uR)- (CA INDEX NAME)

Absolute stereochemistry.



IT 324795-65-5  
 RL: RCT (Reagent); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of succinimide diamides as inhibitors of cysteine proteases (cathepsins) in the treatment of autoimmune diseases, Alzheimer's disease, and atherosclerosis)

RN 324795-65-5 CAPLUS  
 CN Benzenebutanenitrile,  $\alpha$ -amino- $\alpha$ -[(methyl)(phenylmethyl)amino]methyl]- (CA INDEX NAME)



L4 ANSWER 43 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2000-772602 CAPLUS  
 DOCUMENT NUMBER: 133-322132  
 TITLE: Preparation of monomers and oligoureas peptidomimetics  
 INVENTOR(S): Boeijen, Astrid; Liskamp, Rob M. J.; Den Hartog, Jack A.  
 PATENT ASSIGNEE(S): Solvay Pharmaceuticals B.V., Neth.  
 SOURCE: PCT Int. Appl., 22 pp.  
 CODEN: PIIXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

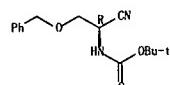
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000046865	A1	20001102	WO 2000-EP2735	20000419
W: AE, AL, AM, AR, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, GE, GR, HN, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KB, KZ, LC, LR, LS, LT, LU, LV, MA, MD, MG, MX, MW, NK, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BE, CG, CI, CM, GA, GN, GR, ML, MR, NE, SN, TD, TC				
AU 2000044030	A	20001110	AU 2000-44030	20000419
PRIORITY APPLN. INFO.: EP: 1999-201268			A 19990423	
			NL 1999-1011878	A 19990423
			WO 2000-EP2735	20000419

OTHER SOURCE(S): CASREACT 133-322132; MARPAT 133-322132

ABSTRACT:  
 Novel protected monomer building blocks BocNHCHRCH2NHCO2C6H4NO2-p (I; Boc = tert-butoxycarbonyl, R represents the side-chain of a natural or unnatural, common or uncommon amino acid in which one or more present functional groups are protected) were prepared and used in the solid-phase synthesis of oligoureas peptides. (S)-BocNHRCN (3; R is side-chain of Phe, Tyr, Leu, Ser, or Lys) were prepared from the Boc-amino acids via the amides. Nitriles 3 were subjected to hydrogenation over Raney Ni and reacted with ClCO2C6H4NO2-p in the presence of DiPEA and DCM to afford I. I (R = H) was prepared directly from BocNH2CH2NH2. Urea dimer (S,S)-HO2CH(CH2C(Me)2)NHCONHCH2CH(CH2Ph)NH2 and trimer (S,S,S)-HO2CH(CH2C(Me)2)NHCONHCH2CH(CH2Ph)NHCONHCH2CH(CH2C6H4OH-p)NH2 were prepared by the solid-phase method using monomers I.

IT 244778-26-SP  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of monomers and oligoureas peptidomimetics)  
 RN 244778-26-5 CAPLUS  
 CN Carboxamic acid, [(1R)-1-cyano-2-(phenylmethoxy)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L4 ANSWER 44 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2000-628128 CAPLUS  
 DOCUMENT NUMBER: 133-208196  
 TITLE: Preparation of peptides as reversible inhibitors of cathepsin S  
 INVENTOR(S): Cywin, Charles L.; Frye, Leah L.; Morwick, Tina;  
 Spero, Denise M.; Thomson, David; Ward, Yancey  
 Boehringer Ingelheim Pharmaceuticals, Inc., USA  
 PATENT ASSIGNEE(S): PCT Int. Appl., 315 pp.  
 SOURCE: CODEN: PIIXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000051998	A1	20000908	WO 1999-US26278	19991105
W: CA, JP, MX, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2360740	A1	20000908	CA 1999-2360740	19991105
EP 1159273	A1	20011205	EP 1999-973745	19991105
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 6395897	B1	20020528	US 1999-434106	19991105
JP 2002538151	T	20021112	JP 2000-602225	19991105
MX 2001PA08713	A	20020225	MX 2001-PA8713	20010828
US 2002091259	A1	20020711	US 2001-82952	20011024
US 6608057	B2	20030819		
US 2003158406	A1	20030821	US 2003-366282	20030213
US 6730871	B2	20040504		
PRIORITY APPLN. INFO.: US 1999-122570P			P 19990302	
			US 1999-434106	A1 19991105
			WO 1999-US26278	W 19991105
			US 2001-82952	A3 20011024

OTHER SOURCE(S): MARPAT 133-208196

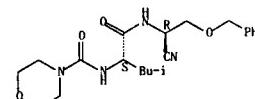
ABSTRACT:  
 Compds. RI-A-NHCR2R3C(:X)NR4CR5R6R7 (A = C(=O), C:S, C:NH or substituted imino group; RI = (un)substituted alkyl, cycloalkyl, aryl, heterocycl, heteroaryl, amino; R2 = H, R3 = II or (un)substituted alkyl, cycloalkyl, aryl, heterocycl, heteroaryl; R5 = H, alkyl, cycloalkyl; R7 = RBC(2), where Z = O, S, NH or substituted derivative and R8 is (un)substituted 5-8 membered monocyclic or 8-11 membered bicyclic heteroaryl having 1-4 heteroatoms selected from N, O and S, and X = O, S, NH were found to be cathepsin S inhibitors. Thus, morpholine-4-carboxylic acid [(1S)-1-(S)-1-cyano-2-(phenylpyruylcarbamoyl)-3-methylbutyl]amide was prepared by coupling L-homophenylalanilamide with N-(4-morpholinocarbonyl)-L-leucine and reaction with cyanuric chloride. Compds. of the invention were evaluated for inhibition of cathepsin S (IC50 < 100 μM).

IT 290816-77-2P 290816-78-3P 290816-81-8P  
 290816-82-9P 290816-83-0P 290816-84-1P  
 290816-85-2P 290816-86-3P 290816-87-4P  
 290816-88-5P 290816-89-6P 290816-90-9P  
 290816-91-0P 290816-92-1P 290816-93-2P  
 290816-94-3P 290816-95-4P 290817-02-6P  
 290817-09-3P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses); (preparation of peptides as reversible inhibitors of cathepsin S)  
 CAPLUS 290816-77-2 CAPLUS  
 CN 4-Morpholinocarbamido, N-[(1S)-1-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-methylbutyl]-(CA INDEX NAME)

L4 ANSWER 43 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

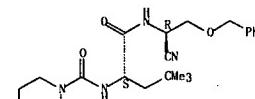
L4 ANSWER 44 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

Absolute stereochemistry.



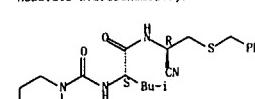
RN 290816-78-3 CAPLUS  
 CN 4-Morpholinocarbamido, N-[(1S)-1-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-dimethylbutyl]-(CA INDEX NAME)

Absolute stereochemistry.



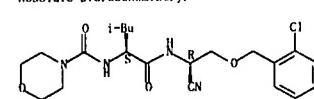
RN 290816-81-8 CAPLUS  
 CN 4-Morpholinocarbamido, N-[(1S)-1-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]thioethyl]amino]carbonyl]-3-methylbutyl]-(CA INDEX NAME)

Absolute stereochemistry.

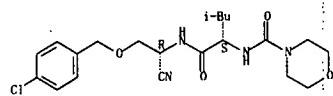


RN 290816-82-9 CAPLUS  
 CN 4-Morpholinocarbamido, N-[(1S)-1-[(1R)-2-[(2-chlorophenyl)methoxy]-1-cyanoethyl]amino]carbonyl]-3-methylbutyl]-(CA INDEX NAME)

Absolute stereochemistry.

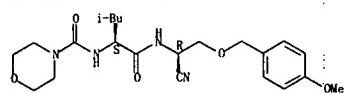


RN 290816-83-0 CAPLUS  
 CN 4-Morpholinocarbamido, N-[(1S)-1-[(1R)-2-[(4-chlorophenyl)methoxy]-1-cyanoethyl]amino]carbonyl]-3-methylbutyl]-(CA INDEX NAME)

L4 ANSWER 44 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
Absolute stereochemistry.

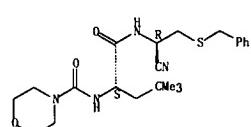
RN 290816-84-1 CAPLUS  
CN 4-Morpholinocarboxamide, N-[{(1S)-1-[(1R)-1-cyano-2-[(4-methoxyphenyl)methoxy]ethyl]amino]carbonyl]-3-methylbutyl- (CA INDEX NAME)

## Absolute stereochemistry.



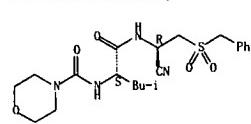
RN 290816-85-2 CAPLUS  
CN 4-Morpholinocarboxamide, N-[{(1S)-1-[(1R)-1-cyano-2-[(phenylmethyl)thio]ethyl]amino]carbonyl]-3,3-dimethylbutyl- (CA INDEX NAME)

## Absolute stereochemistry.

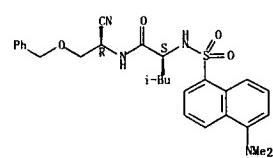


RN 290816-86-3 CAPLUS  
CN 4-Morpholinocarboxamide, N-[{(1S)-1-[(1R)-1-cyano-2-[(phenylmethyl)sulfonyl]ethyl]amino]carbonyl]-3-methylbutyl- (CA INDEX NAME)

## Absolute stereochemistry.

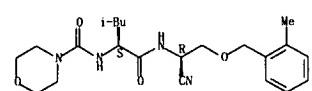


## L4 ANSWER 44 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



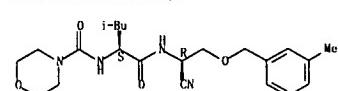
RN 290816-91-0 CAPLUS  
CN 4-Morpholinocarboxamide, N-[{(1S)-1-[(1R)-1-cyano-2-[(2-methylphenyl)methoxy]ethyl]amino]carbonyl]-3-methylbutyl- (CA INDEX NAME)

## Absolute stereochemistry.



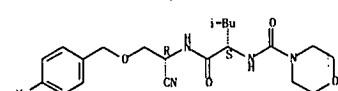
RN 290816-92-1 CAPLUS  
CN 4-Morpholinocarboxamide, N-[{(1S)-1-[(1R)-1-cyano-2-[(3-methylphenyl)methoxy]ethyl]amino]carbonyl]-3-methylbutyl- (CA INDEX NAME)

## Absolute stereochemistry.



RN 290816-93-2 CAPLUS  
CN 4-Morpholinocarboxamide, N-[{(1S)-1-[(1R)-1-cyano-2-[(4-methylphenyl)methoxy]ethyl]amino]carbonyl]-3-methylbutyl- (CA INDEX NAME)

## Absolute stereochemistry.

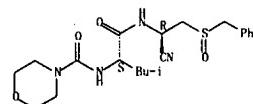


RN 290816-94-3 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-4-methoxy-2-[(4-morpholinyl)carbonyl]amino]1-oxyethyl]amino]ethoxy]methyl- methyl ester (CA INDEX NAME)

## L4 ANSWER 44 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

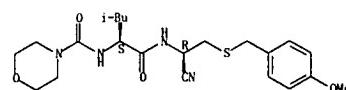
CN 4-Morpholinocarboxamide, N-[{(1S)-1-[(1R)-1-cyano-2-[(phenylmethyl)sulfinyl]ethyl]amino]carbonyl]-3-methylbutyl- (CA INDEX NAME)

## Absolute stereochemistry.



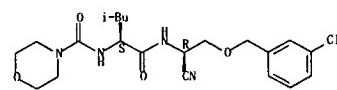
RN 290816-88-5 CAPLUS  
CN 4-Morpholinocarboxamide, N-[{(1S)-1-[(1R)-1-cyano-2-[(4-methoxyphenyl)methyl]thio]ethyl]amino]carbonyl]-3-methylbutyl- (CA INDEX NAME)

## Absolute stereochemistry.



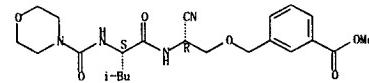
RN 290816-89-6 CAPLUS  
CN 4-Morpholinocarboxamide, N-[{(1S)-1-[(1R)-2-[(3-chlorophenyl)methoxy]ethyl]amino]carbonyl]-3-methylbutyl- (CA INDEX NAME)

## Absolute stereochemistry.



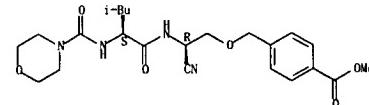
RN 290816-90-9 CAPLUS  
CN Pentanamide, N-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]-2-[(5-(dimethylamino)-1-naphthalenyl)sulfonyl]amino]-4-methyl- (2S)- (CA INDEX NAME)

## Absolute stereochemistry.

L4 ANSWER 44 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
Absolute stereochemistry.

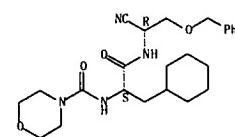
RN 290816-95-4 CAPLUS  
CN Benzoic acid, 4-[(2R)-2-cyano-2-[(2S)-4-methyl-2-[(4-morpholinyl)carbonyl]amino]1-oxyethyl]amino]ethoxy]methyl- methyl ester (CA INDEX NAME)

## Absolute stereochemistry.



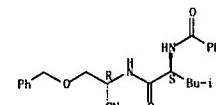
RN 290817-02-6 CAPLUS  
CN 4-Morpholinocarboxamide, N-[{(1S)-2-[(1R)-1-cyano-2-[(phenylmethoxy)ethyl]amino]-1-(cyclohexylmethyl)}-2-oxoethyl]- (CA INDEX NAME)

## Absolute stereochemistry.



RN 290817-09-3 CAPLUS  
CN Benzamide, N-[(1S)-1-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]-3-methylbutyl- (CA INDEX NAME)

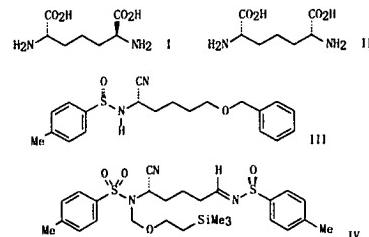
## Absolute stereochemistry.



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L4 ANSWER 44 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

14 ANSWER 45 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2000:252685 CAPLUS  
 DOCUMENT NUMBER: 133:43221  
 TITLE: Asymmetric synthesis of (2S,6S)- and  
 meso-(2S,6R)-diaminopimelic acids from enantiopure  
 bis(sulfinimines)  
 AUTHOR(S): Davis, Franklin A.; Srirajan, Vaidyanathan  
 CORPORATE SOURCE: Department of Chemistry, Temple University,  
 Philadelphia, PA, 19122, USA  
 SOURCE: Journal of Organic Chemistry (2000), 65(10), 3248-3251  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 133:43221  
 GRAPHIC IMAGE:

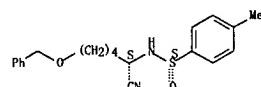


**ABSTRACT:**  
 The asym. synthesis of the title compds. I and II used the sulfinimine-mediated asym. Streater synthesis including the utility of the N-tosyl group as an amino acid protecting group. Thus, addition of ethylaluminum cyanoisopropoxide to (S)-4-MeC<sub>6</sub>H<sub>4</sub>(O)N:CH(CH<sub>2</sub>)COCH<sub>2</sub>Ph gave the  $\alpha$ -amino nitrile III with >96% diastereomeric excess; III was converted to I in eight steps via the sulfinimine IV.

IT 274694-67-6P 274694-68-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation): RACT  
 (Reactant or reagent)  
 (asym. synthesis of diaminopimelic acids using the sulfinimine-mediated  
 asym. Streater synthesis)  
 RN 274694-67-6 CAPLUS  
 CN Benzenesulfonamide, N-[(S)-1-cyano-5-(phenylmethoxy)pentyl]-4-methyl-,  
 [S(S)]- (CA INDEX NAME)

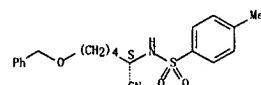
Absolute stereochemistry. Rotation (-).

L4 ANSWER 45 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 274694-68-7 CAPLUS  
 CN Benzenesulfonamide, N-[(S)-1-cyano-5-(phenylmethoxy)pentyl]-4-methyl-,  
 (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

14 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1999:708444 CAPLUS  
 DOCUMENT NUMBER: 131:310455  
 TITLE: Preparation of arylaminoacetonitriles as agricultural  
 and horticultural insecticides  
 INVENTOR(S): Andoh, Nobuharu; Sanpei, Osamu; Sakata, Kazuyuki  
 PATENT ASSIGNEE(S): Nihon Nohyaku Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl. 63 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 953565	A2	19991103	EP 1999-107461	19990428
EP 953565	A3	20021204		
EP 953565	B1	20040908		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6239077	B1	20010529	US 1999-295319	19990421
TW 585849	B	20040501	TW 1999-88106732	19990427
EP 1445251	A1	20040811	EP 2004-10346	19990428
EP 1445251	B1	20041227		
CA 224177				
CN 1123516	B	20031231		
AU 9926027	A	19991111	AU 1999-26027	19990430
AU 752112	B2	20020905		
JP 2000026392	A	20000125	JP 1999-124560	19990430
PRIORITY APPLN. INFO.:				
JP 1998-137806	A			
EP 1999-107461	A3	19990428		

OTHER SOURCE(S): MARPAT 131:310455  
**ABSTRACT:**  
 Ar<sub>1</sub>O(CN)R<sub>3</sub>(CN)R<sub>4</sub>(CR<sub>5</sub>R<sub>6</sub>)aW(CR<sub>7</sub>R<sub>8</sub>)bAr<sub>2</sub> [1]: Ar<sub>1</sub>, Ar<sub>2</sub> = (substituted) Ph, PhO, pyridyl, pyridyloxy, naphthyl; Q = CR<sub>1</sub>R<sub>2</sub>; R<sub>1</sub>, R<sub>2</sub> = H, halo, (halo)alkyl, (halo)alkoxy, (substituted) cycloalkyl; R<sub>1</sub>R<sub>2</sub> = (substituted) C<sub>2</sub>-alkylene, CH:CH, C(=O)balkyl; C(=O)d, O, S, SO<sub>2</sub>, NR<sub>9</sub>; R<sub>9</sub> = H, alkyl; a = b = 0-4 were prepared. Thus, 4-chlorophenyl, bromocetaldehyde diacetate, K<sub>2</sub>CO<sub>3</sub>, and cat. NaI were refluxed in DMF with aqueous HCl in acetone to give crude 4-chlorophenoxyacetaldehyde, which was stirred with NaCN and NaCl in aqueous NH<sub>3</sub> to give a residue. This was stirred with 4-chlorophenylacetyl chloride and Et<sub>3</sub>N in THF to give 1 (Ar<sub>1</sub>, Ar<sub>2</sub> = Ar<sub>1</sub>O(CN)R<sub>3</sub>; R<sub>1</sub>-R<sub>8</sub> = H; W = O; a, d = 1; b = 0). Numerous 1 at 500 ppm gave 100% kill of *Plutella xylostella* on cabbage seedlings.

IT 247197-13-3P	247197-14-4P	247197-15-5P
247197-16-6P	247197-17-7P	247197-18-8P
247197-20-2P	247197-22-4P	247197-35-9P
247197-37-1P	247197-39-3P	247197-41-7P
247197-43-9P	247197-45-1P	247197-56-4P
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247197-64-4P	247197-65-5P	247197-66-6P
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247197-73-3P	247197-72-4P	247197-73-3P
247197-74-6P	247197-75-7P	247197-76-8P
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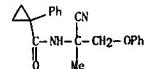
## L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

247198-06-7P 247198-07-8P 247198-08-9P  
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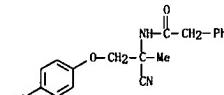
RL: AGR (Agricultural use); BAC (Biological activity or effector, except

(Continued)  
 L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses, (prep., of arylaminoacetonitriles as agricultural and horticultural insecticides)

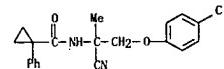
RN 247197-13-3 CAPLUS  
 CN Cyclopropanecarboxamide, N-(1-cyano-1-methyl-2-phenoxyethyl)- (CA INDEX NAME)



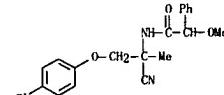
RN 247197-14-4 CAPLUS  
 CN Benzenecacetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



RN 247197-15-5 CAPLUS  
 CN Cyclopropanecarboxamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-1-phenyl- (CA INDEX NAME)

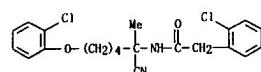


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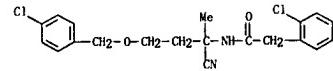


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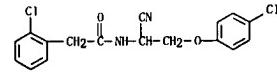
## L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



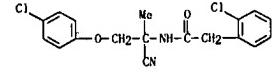
RN 247197-18-8 CAPLUS  
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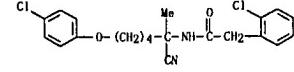
RN 247197-20-2 CAPLUS  
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RN 247197-22-4 CAPLUS  
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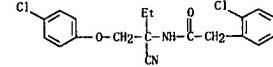
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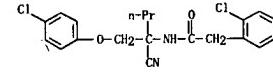
RN 247197-37-1 CAPLUS  
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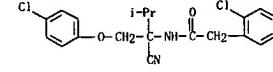
## L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



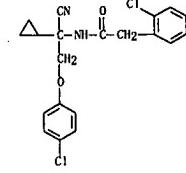
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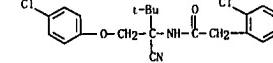
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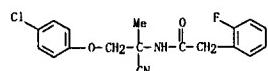
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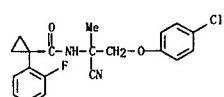
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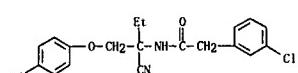
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
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 (CA INDEX NAME)



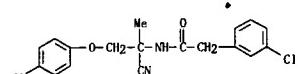
RN 247197-57-5 CAPLUS  
 CN Cyclop propane carboxamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-1-(2-fluorophenyl)- (CA INDEX NAME)



RN 247197-62-2 CAPLUS  
 CN Benzenacetamide, 3-chloro-N-[1-[(4-chlorophenoxy)methyl]-1-cyanopropyl]-  
 (CA INDEX NAME)



RN 247197-63-3 CAPLUS  
 CN Benzenacetamide, 3-chloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-  
 (CA INDEX NAME)

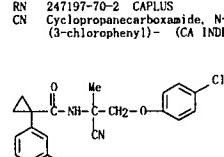


RN 247197-64-4 CAPLUS  
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 (CA INDEX NAME)

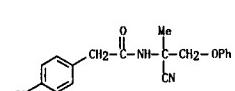


L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

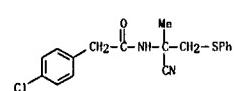
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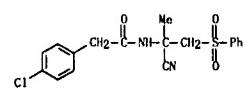
RN 247197-71-3 CAPLUS  
 CN Benzenacetamide, 4-chloro-N-(1-cyano-1-methyl-2-phenoxyethyl)- (CA INDEX NAME)



RN 247197-72-4 CAPLUS  
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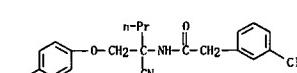
RN 247197-73-5 CAPLUS  
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 (CA INDEX NAME)



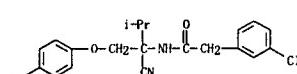
RN 247197-74-6 CAPLUS  
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L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

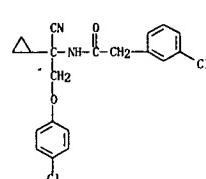
RN 247197-65-5 CAPLUS  
 CN Benzenacetamide, 3-chloro-N-[1-[(4-chlorophenoxy)methyl]-1-cyanobutyl]-  
 (CA INDEX NAME)



RN 247197-66-6 CAPLUS  
 CN Benzenacetamide, 3-chloro-N-[1-[(4-chlorophenoxy)methyl]-1-cyano-2-methylpropyl]-  
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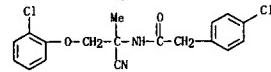


RN 247197-67-7 CAPLUS  
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 (CA INDEX NAME)

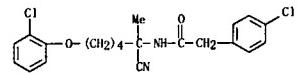


RN 247197-68-8 CAPLUS  
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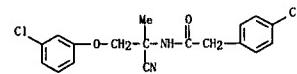
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 (CA INDEX NAME)



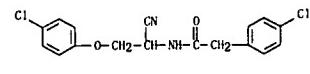
RN 247197-75-7 CAPLUS  
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 (CA INDEX NAME)



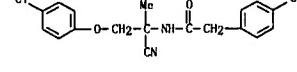
RN 247197-76-8 CAPLUS  
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RN 247197-77-9 CAPLUS  
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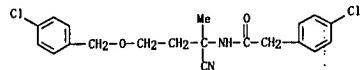


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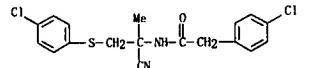


RN 247197-79-1 CAPLUS  
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 (CA INDEX NAME)

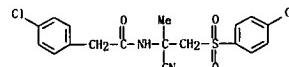
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



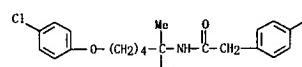
RN 247197-80-4 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[2-[(4-chlorophenyl)thio]-1-cyano-1-methylethyl]- (CA INDEX NAME)



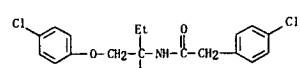
RN 247197-81-5 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[2-[(4-chlorophenyl)sulfonyl]-1-cyano-1-methylethyl]- (CA INDEX NAME)



RN 247197-82-6 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[5-(4-chlorophenoxy)-1-cyano-1-methylpentyl]- (CA INDEX NAME)

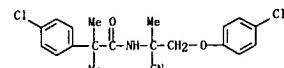


RN 247197-86-0 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[1-[(4-chlorophenoxy)methyl]-1-cyanopropyl]- (CA INDEX NAME)



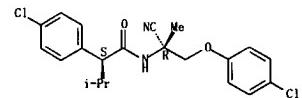
RN 247197-87-1 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[1-[(4-chlorophenoxy)methyl]-1-cyanobutyl]- (CA INDEX NAME)

L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



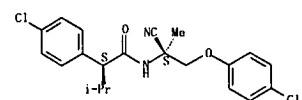
RN 247197-97-3 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[(1R)-2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-α-(1-methylethyl)-, (aS)-rel- (CA INDEX NAME)

Relative stereochemistry.

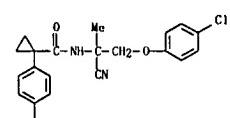


RN 247197-98-4 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[(1R)-2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-α-(1-methylethyl)-, (dR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

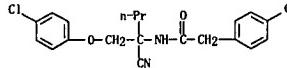


RN 247197-99-5 CAPLUS  
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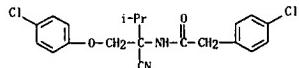


RN 247198-00-1 CAPLUS  
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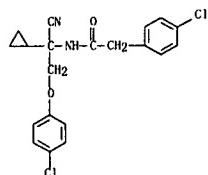
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



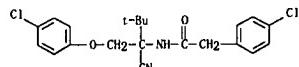
RN 247197-88-2 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[1-[(4-chlorophenoxy)methyl]-1-cyano-2-(4-chlorophenoxy)methyl]- (CA INDEX NAME)



RN 247197-89-3 CAPLUS  
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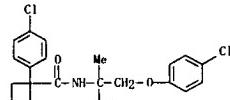


RN 247197-90-6 CAPLUS  
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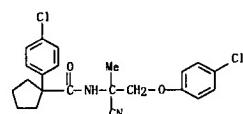


RN 247197-96-2 CAPLUS  
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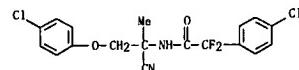
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



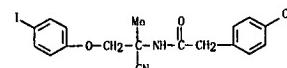
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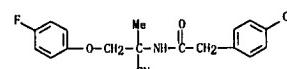
RN 247198-02-3 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-α,α-difluoro- (CA INDEX NAME)



RN 247198-03-4 CAPLUS  
CN Benzenacetamide, 4-chloro-N-[1-cyano-2-(4-iodophenoxy)-1-methylethyl]- (CA INDEX NAME)

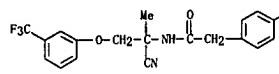


RN 247198-04-5 CAPLUS  
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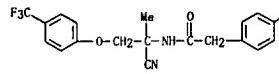


RN 247198-05-6 CAPLUS  
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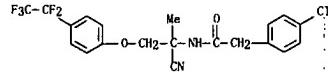
## L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



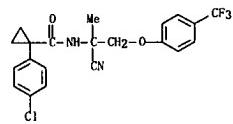
RN 247198-06-7 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-1-methyl-2-(4-(trifluoromethyl)phenoxy)ethyl]- (CA INDEX NAME)



RN 247198-07-8 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-1-methyl-2-(4-(pentfluoroethyl)phenoxy)ethyl]- (9CI) (CA INDEX NAME)

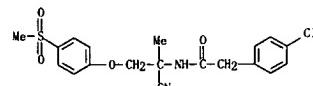


RN 247198-08-9 CAPLUS  
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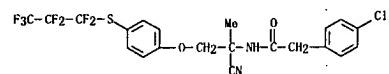


RN 247198-09-0 CAPLUS  
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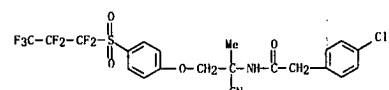
## L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



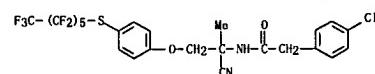
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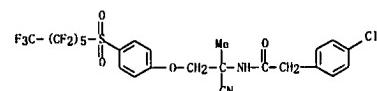
RN 247198-16-9 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-2-(4-(heptafluoropropyl)sulfonyl)phenoxy-1-methylethyl]- (9CI) (CA INDEX NAME)



RN 247198-17-0 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-1-methyl-2-(4-(tridecafluorohexyl)thio)phenoxyl-1-methylethyl]- (9CI) (CA INDEX NAME)

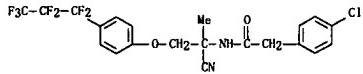


RN 247198-18-1 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-1-methyl-2-(4-(tridecafluorohexyl)sulfonyl)phenoxy]ethyl]- (9CI) (CA INDEX NAME)

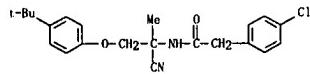


RN 247198-19-2 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-1-methyl-2-(4-(trifluoromethyl)-

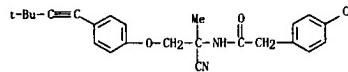
## L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



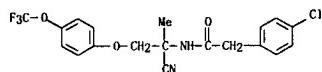
RN 247198-10-3 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-2-(4-(1,1-dimethylethyl)phenoxy)-1-methylethyl]- (CA INDEX NAME)



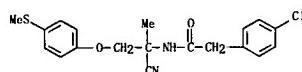
RN 247198-11-4 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-2-(4-(3,3-dimethyl-1-butynyl)phenoxy)-1-methylethyl]- (9CI) (CA INDEX NAME)



RN 247198-12-5 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-1-methyl-2-(4-(trifluoromethoxy)phenoxy)ethyl]- (CA INDEX NAME)

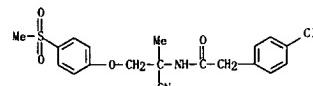


RN 247198-13-6 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-1-methyl-2-(4-(methylthio)phenoxy)ethyl]- (CA INDEX NAME)

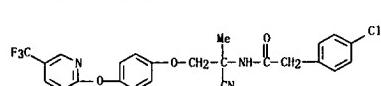


RN 247198-14-7 CAPLUS  
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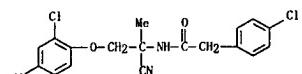
## L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



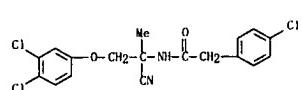
RN 247198-20-5 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-2-(2,4-dichlorophenoxy)-1-methylethyl]- (CA INDEX NAME)



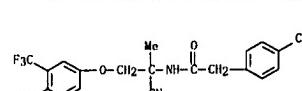
RN 247198-21-6 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[1-cyano-2-(3,4-dichlorophenoxy)-1-methylethyl]- (CA INDEX NAME)



RN 247198-22-7 CAPLUS  
CN Benzenecetamide, 4-chloro-N-[2-(3-chloro-4-fluorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

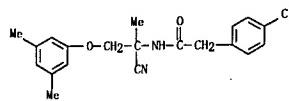


RN 247198-23-8 CAPLUS  
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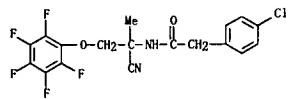


RN 247198-24-9 CAPLUS

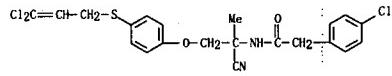
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 CN Benzenacetamide, 4-chloro-N-[1-cyano-2-(3,5-dimethylphenoxy)-1-methylethyl]- (CA INDEX NAME)



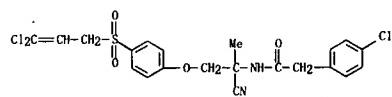
RN 247198-25-0 CAPLUS  
 CN Benzenacetamide, 4-chloro-N-[1-cyano-1-methy]-2-(pentafluorophenoxy)ethyl]- (9CI) (CA INDEX NAME)



RN 247198-26-1 CAPLUS  
 CN Benzenacetamide, 4-chloro-N-[1-cyano-2-[4-[(3,3-dichloro-2-propenyl)thio]phenoxy]-1-methylethyl]- (9CI) (CA INDEX NAME)



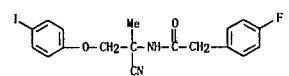
RN 247198-27-2 CAPLUS  
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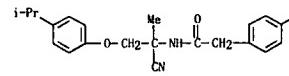
RN 247198-28-3 CAPLUS  
 CN Benzenacetamide, 4-chloro-N-[1-cyano-2-[2,6-dichloro-4-[(3,3-dichloro-2-propenyl)oxy]phenoxy]-1-methylethyl]- (9CI) (CA INDEX NAME)



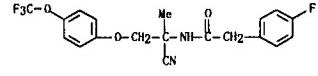
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 RN 247198-34-1 CAPLUS  
 CN Benzenacetamide, N-[1-cyano-2-(4-iodophenoxy)-1-methylethyl]-4-fluoro- (CA INDEX NAME)



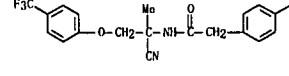
RN 247198-35-2 CAPLUS  
 CN Benzenacetamide, N-[1-cyano-1-methyl-2-[4-(1-methylethyl)phenoxy]ethyl]-4-fluoro- (CA INDEX NAME)



RN 247198-36-3 CAPLUS  
 CN Benzenacetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethoxy)phenoxy]ethyl]-4-fluoro- (CA INDEX NAME)



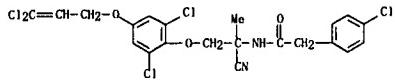
RN 247198-37-4 CAPLUS  
 CN Benzenacetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-fluoro- (CA INDEX NAME)



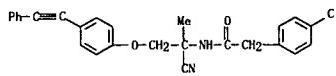
RN 247198-38-5 CAPLUS  
 CN Benzenacetamide, N-[1-cyano-2-(4-cyanophenoxy)-1-methylethyl]-4-fluoro- (CA INDEX NAME)



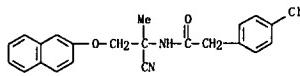
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



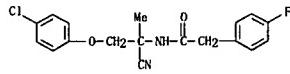
RN 247198-29-4 CAPLUS  
 CN Benzenacetamide, 4-chloro-N-[1-cyano-1-methy]-2-[4-(phenylethynyl)phenoxy]ethyl]- (9CI) (CA INDEX NAME)



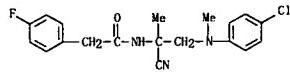
RN 247198-30-7 CAPLUS  
 CN Benzenacetamide, 4-chloro-N-[1-cyano-1-methy]-2-(2-naphthalenyloxy)ethyl]- (CA INDEX NAME)



RN 247198-31-8 CAPLUS  
 CN Benzenacetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-4-fluoro- (CA INDEX NAME)

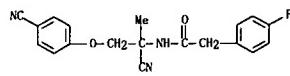


RN 247198-32-9 CAPLUS  
 CN Benzenacetamide, N-[2-[(4-chlorophenyl)methylamino]-1-cyano-1-methylethyl]-4-fluoro- (CA INDEX NAME)

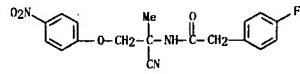


RN 247198-33-0 CAPLUS  
 CN Benzenacetamide, N-[1-cyano-2-(4-fluorophenoxy)-1-methylethyl]-4-fluoro- (CA INDEX NAME)

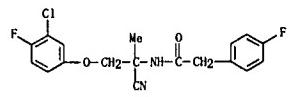
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



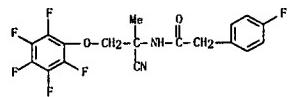
RN 247198-39-6 CAPLUS  
 CN Benzenacetamide, N-[1-cyano-1-methyl-2-(4-nitrophenoxy)ethyl]-4-fluoro- (CA INDEX NAME)



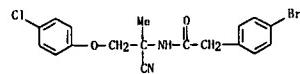
RN 247198-40-9 CAPLUS  
 CN Benzenacetamide, N-[2-(3-chloro-4-fluorophenoxy)-1-cyano-1-methylethyl]-4-fluoro- (CA INDEX NAME)



RN 247198-41-0 CAPLUS  
 CN Benzenacetamide, N-[1-cyano-1-methyl-2-(pentafluorophenoxy)ethyl]-4-fluoro- (9CI) (CA INDEX NAME)

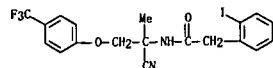


RN 247198-43-2 CAPLUS  
 CN Benzenacetamide, 4-bromo-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

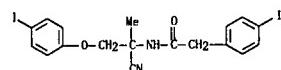


RN 247198-44-3 CAPLUS  
 CN Benzenacetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2-iodo- (CA INDEX NAME)

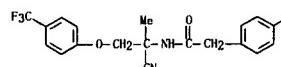
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



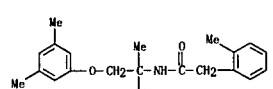
RN 247198-45-4 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(4-iodophenoxy)-1-methylethyl]-4-iodo- (CA INDEX NAME)



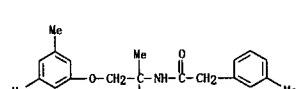
RN 247198-46-5 CAPLUS  
CN Benzenecetamide, N-[1-cyano-1-methyl-2-(4-(trifluoromethyl)phenoxy)ethyl]-4-iodo- (CA INDEX NAME)



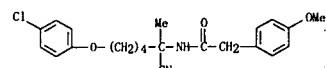
RN 247198-47-6 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(3,5-dimethylphenoxy)-1-methylethyl]-2-methyl- (CA INDEX NAME)



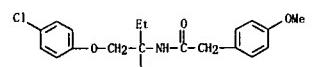
RN 247198-48-7 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(3,5-dimethylphenoxy)-1-methylethyl]-3-methyl- (CA INDEX NAME)



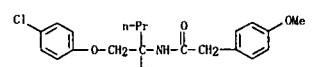
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



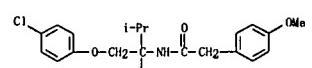
RN 247198-58-9 CAPLUS  
CN Benzenecetamide, N-[1-[(4-chlorophenoxy)methyl]-1-cyanopropyl]-4-methoxy- (CA INDEX NAME)



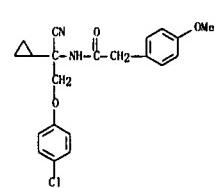
RN 247198-59-0 CAPLUS  
CN Benzenecetamide, N-[1-[(4-chlorophenoxy)methyl]-1-cyanobutyl]-4-methoxy- (CA INDEX NAME)



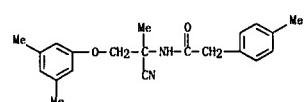
RN 247198-60-3 CAPLUS  
CN Benzenecetamide, N-[1-[(4-chlorophenoxy)methyl]-1-cyano-2-methylpropyl]-4-methoxy- (CA INDEX NAME)



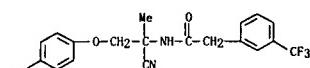
RN 247198-61-4 CAPLUS  
CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-cyclopropylethyl]-4-methoxy- (CA INDEX NAME)



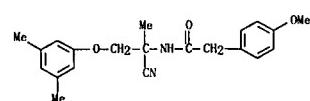
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
RN 247198-49-8 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(3,5-dimethylphenoxy)-1-methylethyl]-4-methyl- (CA INDEX NAME)



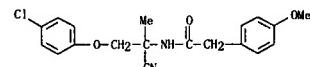
RN 247198-50-1 CAPLUS  
CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-3-(trifluoromethyl)- (CA INDEX NAME)



RN 247198-51-2 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(3,5-dimethylphenoxy)-1-methylethyl]-4-methoxy- (CA INDEX NAME)

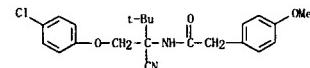


RN 247198-52-3 CAPLUS  
CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-4-methoxy- (CA INDEX NAME)

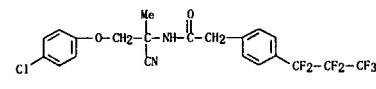


RN 247198-57-8 CAPLUS  
CN Benzenecetamide, N-[5-(4-chlorophenoxy)-1-cyano-1-methylpentyl]-4-methoxy- (CA INDEX NAME)

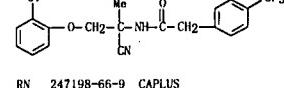
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
RN 247198-62-5 CAPLUS  
CN Benzenecetamide, N-[1-[(4-chlorophenoxy)methyl]-1-cyano-2,2-dimethylpropyl]-4-methoxy- (CA INDEX NAME)



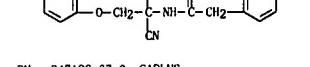
RN 247198-64-7 CAPLUS  
CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-4-(heptafluoropropyl)- (9CI) (CA INDEX NAME)



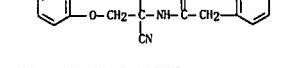
RN 247198-65-8 CAPLUS  
CN Benzenecetamide, N-[2-(2-chlorophenoxy)-1-cyano-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



RN 247198-66-9 CAPLUS  
CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)

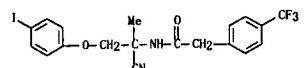


RN 247198-67-0 CAPLUS  
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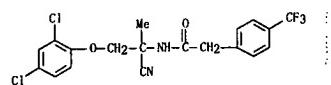


RN 247198-68-1 CAPLUS  
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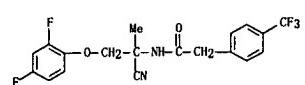
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



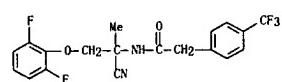
RN 247198-69-2 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-2-(2,4-dichlorophenoxy)-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



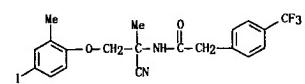
RN 247198-70-5 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-2-(2,4-difluorophenoxy)-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



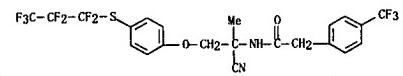
RN 247198-71-6 CAPLUS  
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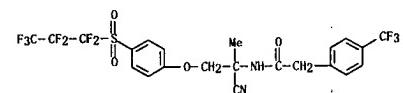
RN 247198-72-7 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-2-(4-iodo-2-methylphenoxy)-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



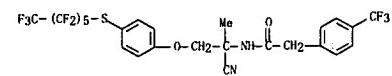
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
RN 247198-78-3 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-2-[4-(heptafluoropropyl)thio]phenoxy]-1-methylethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



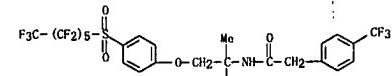
RN 247198-79-4 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-2-[4-(heptafluoropropyl)sulfonyl]phenoxy]-1-methylethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 247198-80-7 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-1-methyl]-2-[4-[(tridecafluorohexyl)thio]phenoxy]-1-methylethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

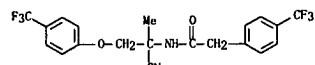


RN 247198-81-8 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-1-methyl]-2-[4-[(tridecafluorohexyl)sulfonyl]phenoxy]-1-methylethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

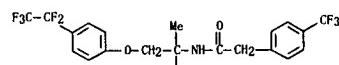


RN 247198-82-9 CAPLUS  
CN Benzoic acid, 4-(2-cyano-2-[[4-(trifluoromethyl)phenyl]acetyl]amino)propoxy-, methyl ester (9CI) (CA INDEX NAME)

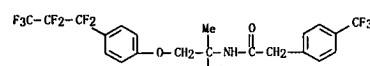
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
RN 247198-73-8 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



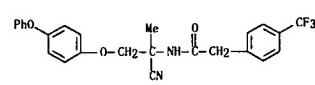
RN 247198-74-9 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-1-methyl]-2-[4-(pentafluoroethyl)phenoxyethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



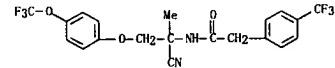
RN 247198-75-0 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-2-[4-(heptafluoropropyl)phenoxy]-1-methylethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



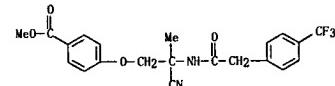
RN 247198-76-1 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-1-methyl]-2-(4-phenoxyphenoxyethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



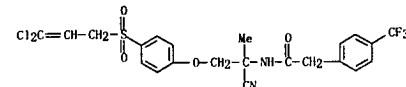
RN 247198-77-2 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethoxy)phenoxyethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



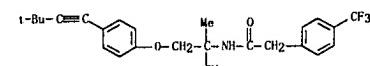
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



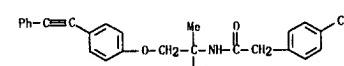
RN 247198-83-0 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-2-[4-(3,3-dichloro-2-propenyl)sulfonyl]phenoxy]-1-methylethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



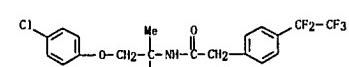
RN 247198-84-1 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-2-[4-(3,3-dimethyl-1-butynyl)phenoxy]-1-methylethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 247198-85-2 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-1-methyl]-2-[4-(phenylethynyl)phenoxyethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

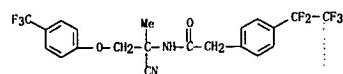


RN 247198-86-3 CAPLUS  
CN Benzenecacetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-4-(pentafluoroethyl)- (9CI) (CA INDEX NAME)

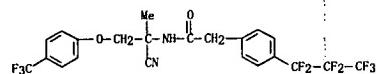


RN 247198-87-4 CAPLUS  
CN Benzenecacetamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]-4-(pentafluoroethyl)- (9CI) (CA INDEX NAME)

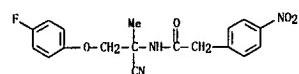
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



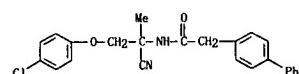
RN 247198-88-5 CAPLUS  
CN Benzenecetamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(heptafluoropropyl)- (9CI) (CA INDEX NAME)



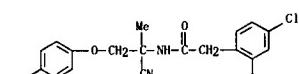
RN 247198-89-6 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(4-fluorophenoxy)-1-methylethyl]-4-nitro- (CA INDEX NAME)



RN 247198-90-9 CAPLUS  
CN [1,1'-Biphenyl]-4-acetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

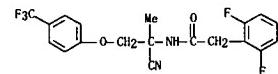


RN 247198-91-0 CAPLUS  
CN Benzenecetamide, 2,4-dichloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

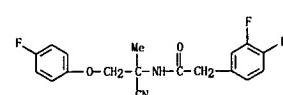


RN 247198-92-1 CAPLUS  
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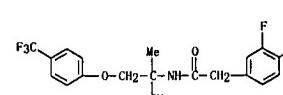
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



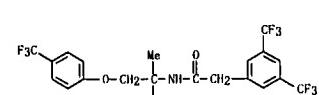
RN 247198-97-6 CAPLUS  
CN Benzenecetamide, N-[1-cyano-2-(4-fluorophenoxy)-1-methylethyl]-3,4-difluoro- (CA INDEX NAME)



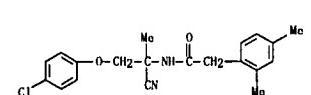
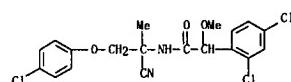
RN 247198-98-7 CAPLUS  
CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-3,4-difluoro- (CA INDEX NAME)



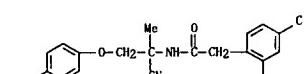
RN 247198-99-8 CAPLUS  
CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-3,5-bis(trifluoromethyl)- (CA INDEX NAME)



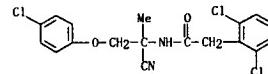
RN 247199-00-4 CAPLUS  
CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-2,4-dimethyl- (CA INDEX NAME)

L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
[methylethyl]-*a*-methoxy-

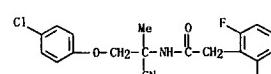
RN 247198-93-2 CAPLUS  
CN Benzenecetamide, 2,4-dichloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



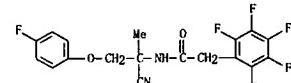
RN 247198-94-3 CAPLUS  
CN Benzenecetamide, 2,6-dichloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



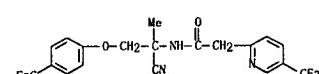
RN 247198-95-4 CAPLUS  
CN Benzenecetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-2,6-difluoro- (CA INDEX NAME)



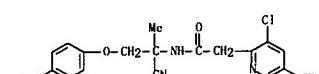
RN 247198-96-5 CAPLUS  
CN Benzenecetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2,6-difluoro- (CA INDEX NAME)

L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
[1-cyano-1-methyl-2-(4-fluorophenoxy)-1-methylethyl]-2,3,4,5,6-pentafluoro-

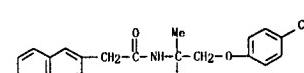
RN 247199-02-6 CAPLUS  
CN 2-Pyridineacetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-5-(trifluoromethyl)- (CA INDEX NAME)



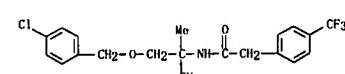
RN 247199-03-7 CAPLUS  
CN 2-Pyridineacetamide, 3-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-5-(trifluoromethyl)- (CA INDEX NAME)



RN 247199-04-8 CAPLUS  
CN 2-Naphthalenacetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)

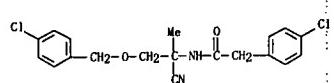


RN 247199-05-9 CAPLUS  
CN Benzenecetamide, N-[2-[4-(chlorophenyl)methoxy]-1-cyano-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)

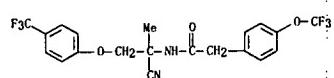


RN 247199-06-0 CAPLUS

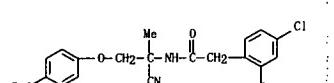
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 CN Benzenacetamide, 4-chloro-N-[2-(4-chlorophenoxy)methoxy]-1-cyano-1-methylethyl- (CA INDEX NAME)



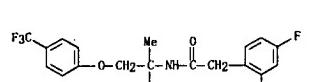
RN 247199-09-3 CAPLUS  
 CN Benzenacetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



RN 247199-10-0 CAPLUS  
 CN Benzenacetamide, 4-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2-fluoro- (CA INDEX NAME)



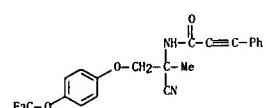
RN 247199-11-7 CAPLUS  
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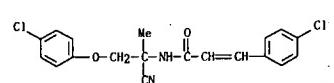
RN 247199-12-8 CAPLUS  
 CN Benzenacetamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2,4-difluoro- (CA INDEX NAME)



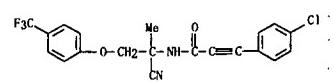
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



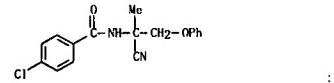
RN 247199-17-3 CAPLUS  
 CN 2-Propynamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-3-(4-chlorophenyl)- (CA INDEX NAME)



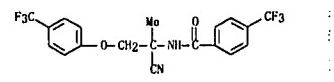
RN 247199-18-4 CAPLUS  
 CN 2-Propynamide, 3-(4-chlorophenyl)-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



RN 247199-19-5 CAPLUS  
 CN Benzamide, 4-chloro-N-(1-cyano-1-methyl-2-phenoxyethyl)- (CA INDEX NAME)

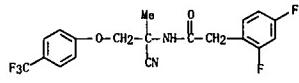


RN 247199-20-8 CAPLUS  
 CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(trifluoromethyl)- (CA INDEX NAME)

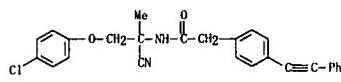


RN 247199-21-9 CAPLUS  
 CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-3-(trifluoromethyl)- (CA INDEX NAME)

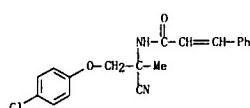
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



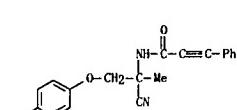
RN 247199-13-9 CAPLUS  
 CN Benzenacetamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)



RN 247199-14-0 CAPLUS  
 CN 2-Propynamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-3-phenyl- (CA INDEX NAME)

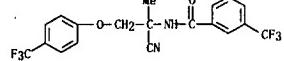


RN 247199-15-1 CAPLUS  
 CN 2-Propynamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-3-phenyl- (CA INDEX NAME)

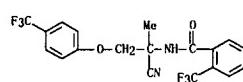


RN 247199-16-2 CAPLUS  
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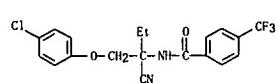
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



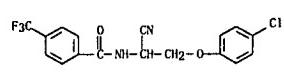
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 CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2-(trifluoromethyl)- (CA INDEX NAME)



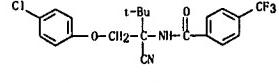
RN 247199-23-1 CAPLUS  
 CN Benzamide, N-[1-(4-chlorophenoxy)methyl]-1-cyanopropyl-4-(trifluoromethyl)- (CA INDEX NAME)



RN 247199-24-2 CAPLUS  
 CN Benzamide, N-[2-(4-chlorophenoxy)-1-cyanoethyl]-4-(trifluoromethyl)- (CA INDEX NAME)

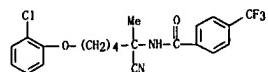


RN 247199-25-3 CAPLUS  
 CN Benzamide, N-[1-(4-chlorophenoxy)methyl]-1-cyano-2,2-dimethylpropyl-4-(trifluoromethyl)- (CA INDEX NAME)

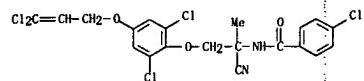


RN 247199-27-5 CAPLUS  
 CN Benzamide, N-[2-(2-chlorophenoxy)-1-cyano-1-methylpentyl]-4-(trifluoromethyl)- (CA INDEX NAME)

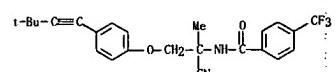
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



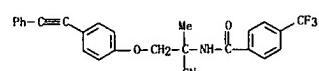
RN 247199-28-6 CAPLUS  
CN Benzamide, 4-chloro-N-[1-cyano-2-[2,6-dichloro-4-[3,3-dichloro-2-propenyl]oxy]phenoxy]-1-methylethyl)- (SCI) (CA INDEX NAME)



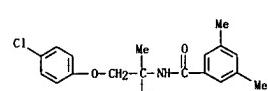
RN 247199-29-7 CAPLUS  
CN Benzamide, N-[1-cyano-2-[4-(3,3-dimethyl-1-butynyl)phenoxy]-1-methylethyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



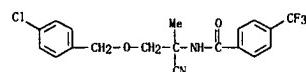
RN 247199-30-0 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(phenylethynyl)phenoxy]ethyl]-4-(trifluoromethyl)- (SCI) (CA INDEX NAME)



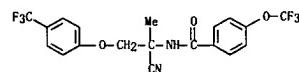
RN 247199-31-1 CAPLUS  
CN Benzamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-3,5-dimethyl- (CA INDEX NAME)



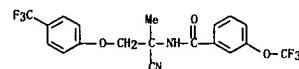
RN 247199-32-2 CAPLUS

L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
CN Benzamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-4-(trifluoromethyl)- (CA INDEX NAME)

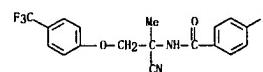
RN 247199-33-3 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(trifluoromethoxy)- (CA INDEX NAME)



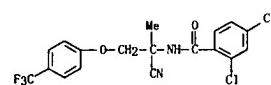
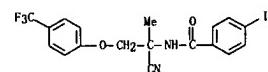
RN 247199-34-4 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-3-(trifluoromethoxy)- (CA INDEX NAME)



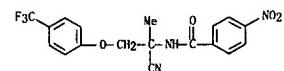
RN 247199-36-6 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-fluoro- (CA INDEX NAME)



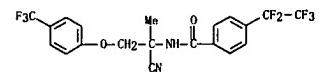
RN 247199-37-7 CAPLUS  
CN Benzamide, 2,4-dichloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
RN 247199-38-8 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-iodo- (CA INDEX NAME)

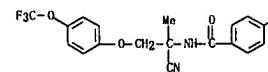
RN 247199-39-9 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-nitro- (CA INDEX NAME)



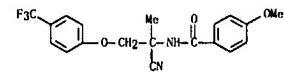
RN 247199-40-2 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(pentfluoroethyl)- (9CI) (CA INDEX NAME)



RN 247199-41-3 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethoxy)phenoxy]ethyl]-4-(trifluoromethyl)- (CA INDEX NAME)

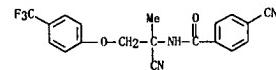


RN 247199-42-4 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-methoxy- (CA INDEX NAME)

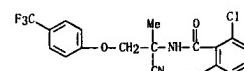


RN 247199-43-5 CAPLUS  
CN Benzamide, 4-cyano-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

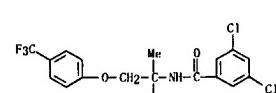
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



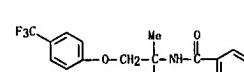
RN 247199-44-6 CAPLUS  
CN Benzamide, 2,6-dichloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



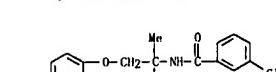
RN 247199-45-7 CAPLUS  
CN Benzamide, 3,5-dichloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



RN 247199-46-8 CAPLUS  
CN Benzamido, 2-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

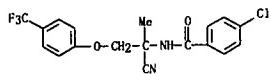


RN 247199-47-9 CAPLUS  
CN Benzamide, 3-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

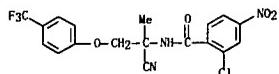


RN 247199-48-0 CAPLUS  
CN Benzamide, 4-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

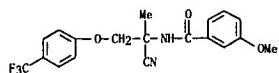
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



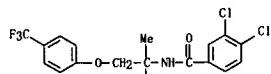
RN 247199-49-1 CAPLUS  
CN Benzamide, 2-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-nitro- (CA INDEX NAME)



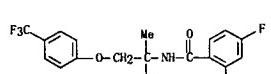
RN 247199-50-4 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-3-methoxy- (CA INDEX NAME)



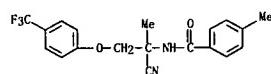
RN 247199-51-5 CAPLUS  
CN Benzamide, 3,4-dichloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



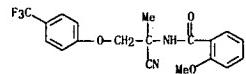
RN 247199-52-6 CAPLUS  
CN Benzamide, 2-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-fluoro- (CA INDEX NAME)



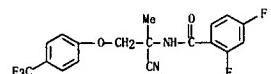
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



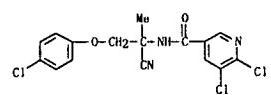
RN 247199-59-3 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2-methoxy- (CA INDEX NAME)



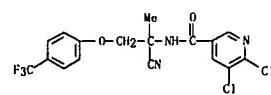
RN 247199-60-6 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2,4-difluoro- (CA INDEX NAME)



RN 247199-61-7 CAPLUS  
CN 3-Pyridinecarboxamide, 5,6-dichloro-N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]- (CA INDEX NAME)



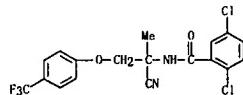
RN 247199-62-8 CAPLUS  
CN 3-Pyridinecarboxamide, 5,6-dichloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



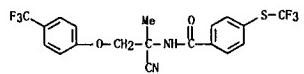
RN 247199-63-9 CAPLUS  
CN 3-Pyridinecarboxamide, 2-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

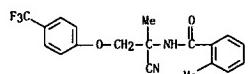
RN 247199-54-8 CAPLUS  
CN Benzamide, 2,5-dichloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



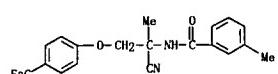
RN 247199-55-9 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



RN 247199-56-0 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-2-methyl- (CA INDEX NAME)

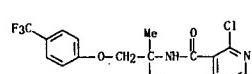


RN 247199-57-1 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-3-methyl- (CA INDEX NAME)

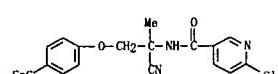


RN 247199-58-2 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-methyl- (CA INDEX NAME)

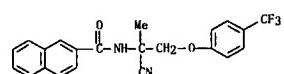
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



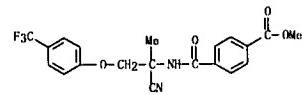
RN 247199-64-0 CAPLUS  
CN 3-Pyridinecarboxamide, 6-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



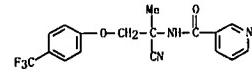
RN 247199-65-1 CAPLUS  
CN 2-Naphthalene carboxamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)



RN 247199-66-2 CAPLUS  
CN Benzoic acid, 4-[[1-cyano-1-methyl-2-(4-(trifluoromethyl)phenoxy)ethyl]amino]carbonyl-, methyl ester (CA INDEX NAME)

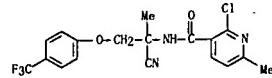


RN 247199-67-3 CAPLUS  
CN 3-Pyridinecarboxamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

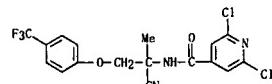


RN 247199-68-4 CAPLUS  
CN 3-Pyridinecarboxamide, 2-chloro-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-6-methyl- (CA INDEX NAME)

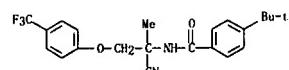
## L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



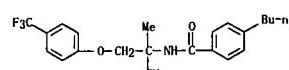
RN 247199-69-5 CAPLUS  
CN 4-Pyridinecarboxamide, 2,6-dichloro-N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]- (CA INDEX NAME)



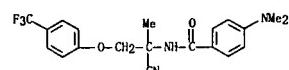
RN 247199-70-8 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]-4-(1,1-dimethylethyl)- (CA INDEX NAME)



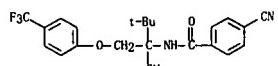
RN 247199-71-9 CAPLUS  
CN Benzamide, 4-butyl-N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]- (CA INDEX NAME)



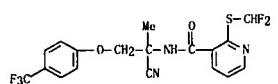
RN 247199-72-0 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]-4-(dimethylamino)- (CA INDEX NAME)



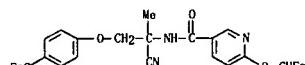
RN 247199-73-1 CAPLUS  
CN Benzamide, 4-cyano-N-[1-cyano-2,2-dimethyl]-1-{[4-

L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
(trifluoromethyl)phenoxy]methyl}propyl}- (CA INDEX NAME)

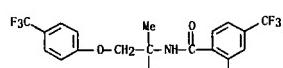
RN 247199-74-2 CAPLUS  
CN 3-Pyridinecarboxamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]-2-(difluoromethylthio)- (CA INDEX NAME)



RN 247199-75-3 CAPLUS  
CN 3-Pyridinecarboxamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]-6-(difluoromethoxy)- (CA INDEX NAME)

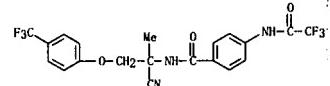


RN 247199-76-4 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]-2-fluoro-4-(trifluoromethyl)- (CA INDEX NAME)

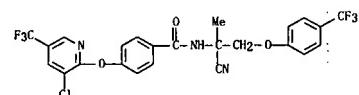


RN 247199-77-5 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]-4-[(trifluoroacetyl)amino]- (9CI) (CA INDEX NAME)

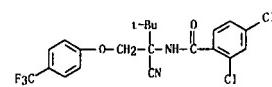
## L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



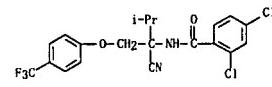
RN 247199-78-6 CAPLUS  
CN Benzamide, 4-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]oxy-N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]- (CA INDEX NAME)



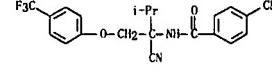
RN 247199-79-7 CAPLUS  
CN Benzamide, 2,4-dichloro-N-[1-cyano-2,2-dimethyl]-1-{[4-(trifluoromethyl)phenoxy]methyl}propyl}- (CA INDEX NAME)



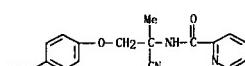
RN 247199-80-0 CAPLUS  
CN Benzamide, 2,4-dichloro-N-[1-cyano-2-methyl]-1-{[4-(trifluoromethyl)phenoxy]methyl}- (CA INDEX NAME)



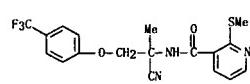
RN 247199-81-1 CAPLUS  
CN Benzamide, 4-cyano-N-[1-cyano-2-methyl]-1-{[4-(trifluoromethyl)phenoxy]methyl}propyl}- (CA INDEX NAME)



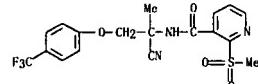
RN 247199-85-5 CAPLUS  
CN 2-Pyridinecarboxamide, N-[1-cyano-1-methyl]-2-[4-

L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
(trifluoromethyl)phenoxyethyl}- (CA INDEX NAME)

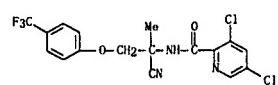
RN 247199-86-6 CAPLUS  
CN 3-Pyridinecarboxamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]-2-(methylthio)- (CA INDEX NAME)



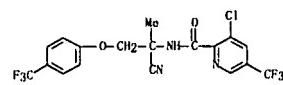
RN 247199-87-7 CAPLUS  
CN 3-Pyridinecarboxamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]-2-(methylsulfonyl)- (CA INDEX NAME)



RN 247199-88-8 CAPLUS  
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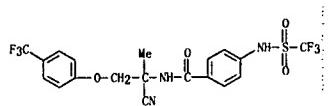


RN 247199-89-9 CAPLUS  
CN 2-Pyridinecarboxamide, 3-chloro-N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]-5-(trifluoromethyl)- (CA INDEX NAME)

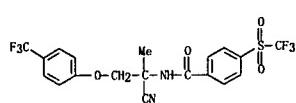


RN 247199-90-2 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl]-2-[4-(trifluoromethyl)phenoxyethyl]-4-

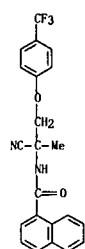
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
[[(trifluoromethyl)sulfonyl]amino]- (CA INDEX NAME)



RN 247199-92-4 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-[(trifluoromethyl)sulfonyl]- (CA INDEX NAME)

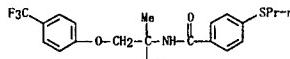


RN 247199-93-5 CAPLUS  
CN 1-Naphthalenecarboxamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

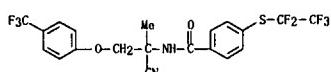


RN 247199-94-6 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-(propylthio)- (CA INDEX NAME)

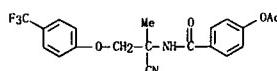
L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



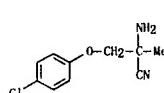
RN 247199-95-7 CAPLUS  
CN Benzamide, N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]-4-[(pentfluoroethyl)thio]- (9CI) (CA INDEX NAME)



RN 247201-37-2 CAPLUS  
CN Benzamide, 4-(acetoxy)-N-[1-cyano-1-methyl-2-[4-(trifluoromethyl)phenoxy]ethyl]- (CA INDEX NAME)

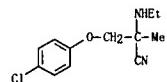


IT 247199-97-0P 247199-98-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation): RACT (Reactant or reagent)  
(preparation of arylaminonitriles as agricultural and horticultural insecticides)  
RN 247199-97-9 CAPLUS  
CN Propanenitrile, 2-amino-3-(4-chlorophenoxy)-2-methyl- (CA INDEX NAME)



RN 247199-98-0 CAPLUS  
CN Propanenitrile, 3-(4-chlorophenoxy)-2-(ethylamino)-2-methyl- (CA INDEX NAME)

L4 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 47 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1999:559542 CAPLUS  
DOCUMENT NUMBER: 131:257869  
TITLE: Solid-phase synthesis of oligoura peptidomimetics  
AUTHOR(S): Boeijen, Astrid; Liskamp, Rob M. J.  
CORPORATE SOURCE: Dep. Medicinal Chemistry, Utrecht Institute of Pharmaceutical Sciences, Utrecht Univ., Utrecht, 3508 TB, Neth.  
SOURCE: European Journal of Organic Chemistry (1999), (9), 2127-2135

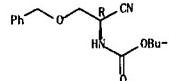
PUBLISHER: Wiley-VCH Verlag GmbH  
DOCUMENT TYPE: Journal Article  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 131:257869

ABSTRACT:  
A procedure for the solid-phase synthesis of oligoura peptidomimetics starting from Boc-protected monomers is described. The compds. are prepared on Tentagel resin and are obtained selectively either as the C-terminal free acids with UV irradiation using a photocleavable linker or as C-terminal hydantoins with 10% TEA/MeOH and a catalytic amount of KCN.

IT 244778-26-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation): RACT (Reactant or reagent)  
(solid-phase synthesis of oligoura peptidomimetics)

RN 244778-26-5 CAPLUS  
CN Carbamic acid, [(1R)-1-cyano-2-(phenylmethoxy)ethyl]-, 1,1-dimethylallyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



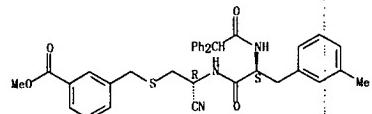
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1999-325961 CAPLUS  
 DOCUMENT NUMBER: 130-352553  
 TITLE: Synthesis of dipeptide nitriles as inhibitors of cysteine cathepsins  
 INVENTOR(S): Altmann, Eva; Beischert, Claudia; Goehde, Keigo;  
 Horiuchi, Miyuki; Laitman, Rene; Missbach, Martin;  
 Sakaki, Junichi; Takei, Michihiro; Teno, Naoki; Cowen,  
 Scott Douglas; Greenspan, Paul David; McQuire, Leslie  
 Wighton; Tommasi, Ruben Alberto; Van Duzer, John Henry  
 PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis-Erfindungen  
 SOURCE: PCT Int. Appl., 137 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUN. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9924460	A2	19990520	WO 1998-EP6937	19981103
WO 9924460	A3	19990900		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LR, LS, LT, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, ZW				
RW: CH, GM, KE, LS, MW, SD, SZ, OG, ZW	AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2306513	A1	1998-2306313	CA 1998-2306313	19981103
AU 9914873	A	19991103	AU 1999-14873	19981103
AU 751665	D2	20020822		
EP 1028942	A2	20000823	EP 1998-058887	19981103
R: AT, BE, CH, DE, DK, ES, FR, GB, CR, IT, LI, LU, NL, SE, NC, PT, IE, FI				
BR 9813197	A	20000829	BR 1998-13197	19981103
TR 200001189	T2	20000921	TR 2000-1189	19981103
JP 2005122862	T	20011120	JP 2000-520468	19981103
HU 200004400	A2	20020429	HU 2000-4400	19981103
RU 2201420	C2	20030327	RU 2000-114821	19981103
ZA 9810073	A	19990505	ZA 1998-10073	19981104
TV 527362	B	20030411	TV 1998-87118553	19981105
NO 2000002320	A	20000704	NO 2000-2320	20000502
MX 2000PA04375	A	20001211	MX 2000-PA4375	20000504
US 6353017	B1	20020305	US 2000-63639	20000822
US 2004029814	A1	20040212	US 2003-342872	20031115
US 200410806	A1	20040610	US 2003-694672	20031028
US 2006235220	A1	20061019	US 2006-374995	20060515
PRIORITY APPLN. INFO. :				
GB 1997-23407	A	19971105		
US 1997-108160P	P	19971205		
US 1997-985973	A	19971205		
WO 1998-EP6937	W	19981103		
US 1998-186223	B1	19981104		
US 2000-643639	A1	20000822		
US 2002-54590	B1	20020122		
US 2003-342872	A1	20030115		
US 2003-694672	B1	20031028		
OTHER SOURCE(S): MARPAT 130-352553				
ABSTRACT:				

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 RN 225121-10-8 CAPLUS  
 CN Benzoic acid, 3-[[[(2R)-2-cyano-2-[(2S)-2-[(diphenylacetyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethyl]thio]methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



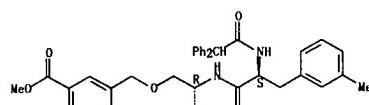
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	225119-41-5P	225119-42-6P	225119-61-9P
	225119-62-0P	225120-41-2P	225121-06-2P
	225121-07-3P	225121-11-9P	225121-14-2P
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	225121-21-1P	225121-22-2P	225121-23-3P
	225121-24-2P	225121-25-5P	225121-26-6P
	225121-27-7P	225121-29-9P	225121-30-9P
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	225121-52-8P	225121-53-9P	225121-54-0P
	225121-55-1P	225121-56-2P	225121-57-3P
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	225121-61-9P	225121-62-0P	225121-63-1P
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	225122-16-7P	225122-17-8P	225122-18-9P
RN	225118-76-3 CAPLUS		
CN	Carboximic acid, [(1-[(1R)-1-cyano-2-(phenylmethoxy)ethyl]amino]carbonyl]cyclohexyl-, phenylmethyl ester (9CI) (CA INDEX NAME)		

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 N-terminal substituted dipeptide nitriles R(L)x1NHCR2R3C(:Y)NHCR4R5CN [R is optionally substituted alkyl, aryl, alkenyl, alkynyl, heterocycl; R2, R3 = H, optionally substituted alkyl, cycloalkyl, bicycloalkyl; R2 and R3 together represent alkylene, optionally interrupted by O, S, or NR6, where R6 is H, alkyl, arylalkyl; or R2 or R3 are linked by alkylene to the adjacent nitrogen to form a ring; R4, R5 = H, optionally substituted alkyl, arylalkyl, CO2R7, CONR7R8 (R7 is optionally substituted alkyl, aryl, arylalkyl, cycloalkyl, bicycloalkyl, heterocycl), etc.; R4 and R5 together represent alkylene, optionally interrupted by O, S, or NR6; X = O, S, or C(=O); S2, P(O)OR8; Y = O, S, or C(=O); R is optionally substituted H, -CH2-, CH2-Het (Het = O, N, or S); x = zero or 1] are provided, as inhibitors of cysteine cathepsins, e.g., cathepsins B, K, L and S, and can be used for the treatment of cysteine cathepsin-dependent diseases and conditions. Thus, N-[2-[(3-carboxyphenyl)methoxy]-1(S)-cysteinyll]-3-methyl-N-(2-(2-diphenylacetyl)-L-phenylalaninamide was prepared, and shown to have IC50 = 5 nM for inhibition of cathepsin B.

IT 225121-05-1P 225121-08-4P 225121-10-8P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses);  
 (synthesis of dipeptide nitriles as inhibitors of cysteine cathepsins)

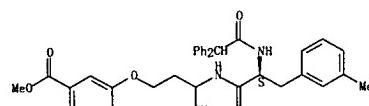
RN 225121-05-1 CAPLUS  
 CN Benzoic acid, 3-[[[(2R)-2-cyano-2-[(2S)-2-[(diphenylacetyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethyl]thio]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



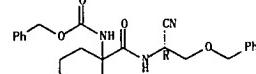
RN 225121-08-4 CAPLUS  
 CN Benzoic acid, 3-[[3-cyano-2-[(2S)-2-[(diphenylacetyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]propoxy]-methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



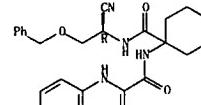
L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

Absolute stereochemistry.



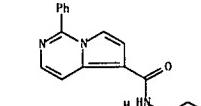
RN 225118-80-9 CAPLUS  
 CN 1H-Indole-2-carboxamide, N-[1-[[((IR)-1-cyano-2-(phenylmethoxy)ethyl)amino]carbonyl]cyclohexyl- (CA INDEX NAME)

Absolute stereochemistry.



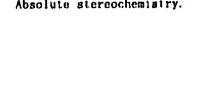
RN 225118-81-0 CAPLUS  
 CN Pyrrole[1,2-c]pyrimidine-5-carboxamide, N-[1-[[((IR)-1-cyano-2-(phenylmethoxy)ethyl)amino]carbonyl]cyclohexyl- (CA INDEX NAME)

Absolute stereochemistry.

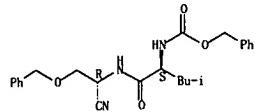


RN 225118-92-3 CAPLUS  
 CN Carbamic acid, [(1S)-1-[(1(R)-1-cyano-2-(phenylmethoxy)ethyl)amino]carbonyl]y]-3-methylbutyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

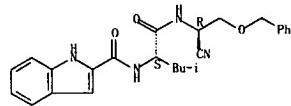


L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



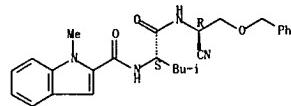
RN 225119-39-1 CAPLUS  
CN 1H-indole-2-carboxamide, N-[(1S)-1-[[((1R)-1-cyano-2-(phenylmethoxyethyl)amino)carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



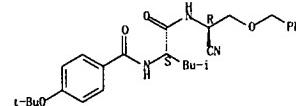
RN 225119-40-4 CAPLUS  
CN 1H-indole-2-carboxamide, N-[(1S)-1-[[((1R)-1-cyano-2-(phenylmethoxyethyl)amino)carbonyl]-3-methylbutyl]-1-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

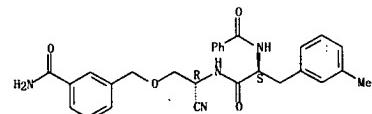


RN 225119-41-5 CAPLUS  
CN Benzamide, N-[(1S)-1-[[((1R)-1-cyano-2-(phenylmethoxyethyl)amino)carbonyl]-3-methylbutyl]-4-(1,1-dimethylethoxy)- (CA INDEX NAME)

Absolute stereochemistry.

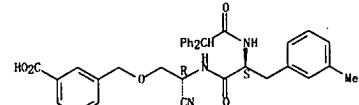


L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



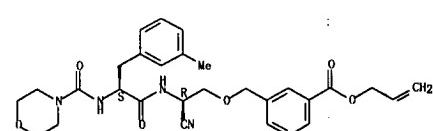
RN 225121-06-2 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(diphenylacetyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-07-3 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-2-[(4-morpholinylcarbonyl)amino]-1-oxopropyl]amino]ethoxy]methyl-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



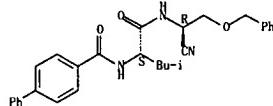
RN 225121-11-9 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(diphenylacetyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]nethyl]sulfinylmethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

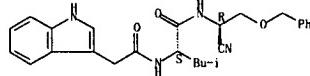
RN 225119-42-6 CAPLUS  
CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-1-[[((1R)-1-cyano-2-(phenylmethoxyethyl)amino)carbonyl]-3-methylbutyl]- (CA INDEX NAME)

Absolute stereochemistry.



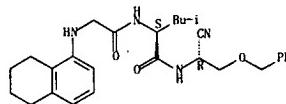
RN 225119-61-9 CAPLUS  
CN 1H-indole-3-acetamide, N-[(1S)-1-[[((1R)-1-cyano-2-(phenylmethoxyethyl)amino)carbonyl]-3-methylbutyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225119-62-0 CAPLUS  
CN L-Leucinamide, N-[(5,6,7,8-tetrahydro-1-naphthalenyl)glycyl-N-[(1R)-1-cyano-2-(phenylmethoxyethyl)- (9CI) (CA INDEX NAME)

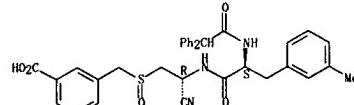
Absolute stereochemistry.



RN 225120-41-2 CAPLUS  
CN Benzenepropanamide, N-[(1R)-2-[[3-(aminocarbonyl)phenyl]methoxy]-2-(benzoylamino)-3-methyl-, (oS)- (CA INDEX NAME)

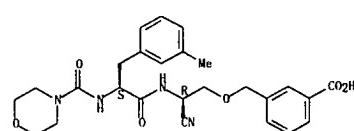
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



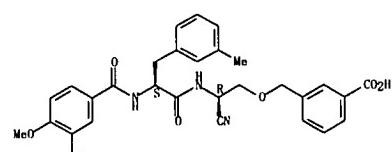
RN 225121-14-2 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-2-[(4-morpholinylcarbonyl)amino]-1-oxopropyl]amino]ethoxy]methyl- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-15-3 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(3,4-dimethoxybenzoyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl- (CA INDEX NAME)

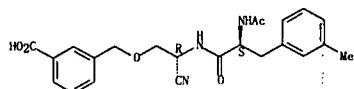
Absolute stereochemistry.



RN 225121-16-4 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-(acetylamino)-3-(3-methylphenyl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl- (CA INDEX NAME)

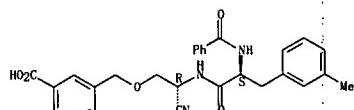
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



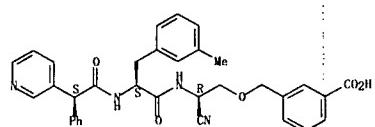
RN 225121-17-5 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-(benzoylamino)-3-(3-methylphenyl)-1-oxopropyl]amino]-2-cyanoethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-18-6 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(2S)-phenyl-3-pyridinylacetyl]amino]propyl]amino]ethoxy)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

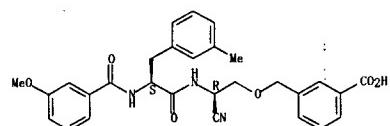


RN 225121-19-7 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(2R)-phenyl-3-pyridinylacetyl]amino]propyl]amino]ethoxy)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

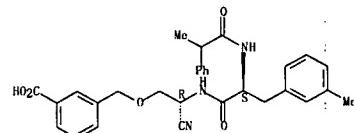


L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



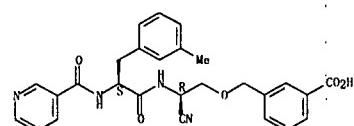
RN 225121-23-3 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-(1-oxo-2-phenylpropyl)amino]propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-24-4 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(3-pyridinylcarbonyl)amino]propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

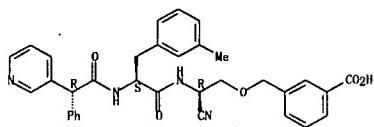


RN 225121-25-5 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(phenylsulfonyl)amino]propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

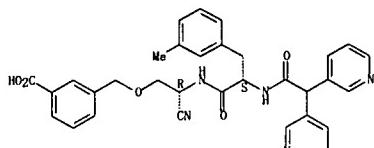


L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



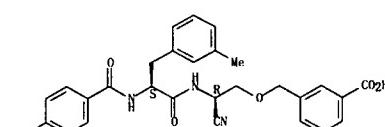
RN 225121-20-0 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(di-3-pyridinylacetyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-21-1 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(4-methoxybenzoyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

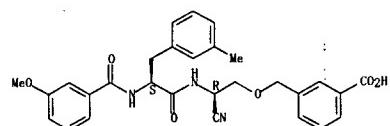
Absolute stereochemistry.



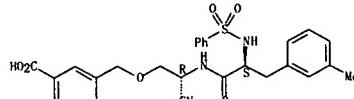
RN 225121-22-2 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(3-methoxybenzoyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

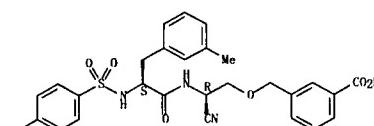


L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



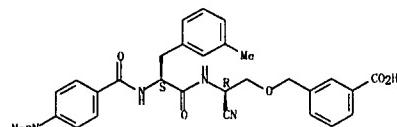
RN 225121-26-6 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-2-[(4-methylphenyl)sulfonyl]amino]1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-27-7 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(4-dimethylaminophenyl)benzoyl]amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



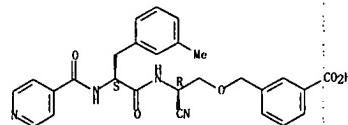
RN 225121-29-9 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(4-pyridinylcarbonyl)amino]propyl]amino]ethoxy)methyl]-mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CHN 225121-28-8  
CMF C27 H26 N4 O5

Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CN 2

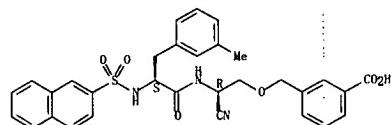
CRN 76-05-1

CMF C2 H F3 O2



RN 225121-30-2 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)amino]-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

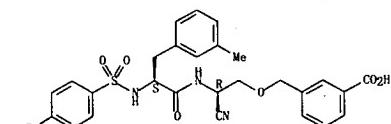
Absolute stereochemistry.



RN 225121-31-3 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(4-bromophenyl)sulfonyl]amino]-3-(3-methylphenyl)-1-oxopropyl]amino]2-cyanoethoxy]methyl]- (CA INDEX NAME)

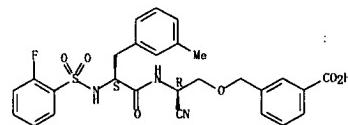
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



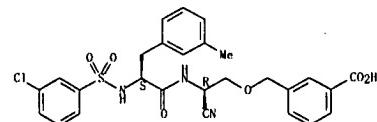
RN 225121-35-7 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2-fluorophenyl)sulfonyl]amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-36-8 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(3-chlorophenyl)sulfonyl]amino]-3-(3-methylphenyl)-1-oxopropyl]amino]2-cyanoethoxy]methyl]- (CA INDEX NAME)

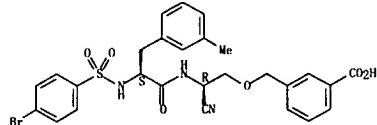
Absolute stereochemistry.



RN 225121-37-9 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(3-fluorophenyl)sulfonyl]amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

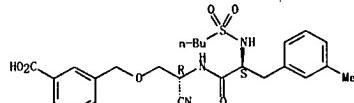
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



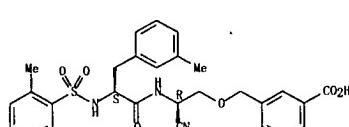
RN 225121-32-4 CAPLUS  
CN Benzoic acid, 3-[(2R,7S)-4-cyano-7-[(3-methylphenyl)methyl]-9,9-dioxido-6-oxo-2-oxa-9-thia-5,8-diazatridec-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-33-5 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

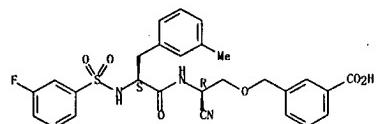
Absolute stereochemistry.



RN 225121-34-6 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(4-propylphenyl)sulfonyl]propyl]amino]ethoxy]methyl]- (CA INDEX NAME)

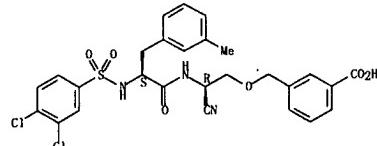
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



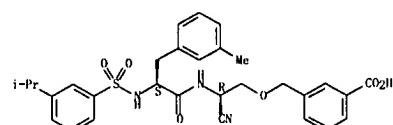
RN 225121-38-0 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(3,4-dichlorophenyl)sulfonyl]amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-39-1 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(3,4-dichlorophenyl)sulfonyl]amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

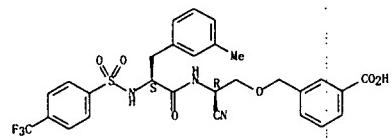
Absolute stereochemistry.



RN 225121-40-4 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(4-isopropylphenyl)sulfonyl]propyl]amino]ethoxy]methyl]- (CA INDEX NAME)

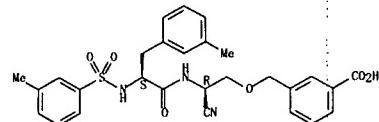
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



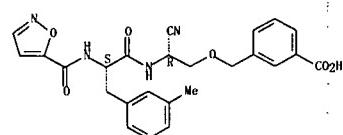
RN 225121-41-5 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)amino]-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-42-6 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-(5-isoxazolylcarbonyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

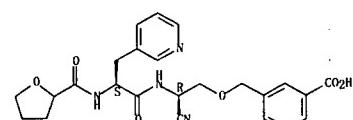
Absolute stereochemistry.



RN 225121-43-7 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(4-methoxyphenyl)-1-oxobutyl]amino]propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

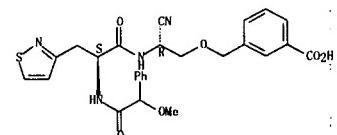
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



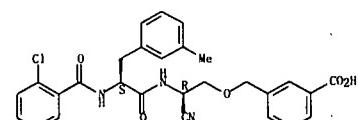
RN 225121-47-1 CAPLUS  
CN Benzoic acid, 3-[(2R, 7S)-4-cyano-7-(3-isothiazolylmethyl)-6,9-dioxo-10-phenyl-2,11-dioxa-5,8-diazadodec-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-48-2 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(2-chlorobenzoyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]-2-cyanoethoxy)methyl]- (CA INDEX NAME)

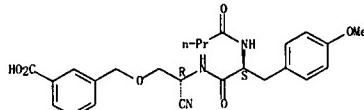
Absolute stereochemistry.



RN 225121-49-3 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(cyclohexylcarbonyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

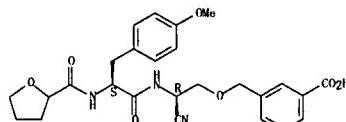
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



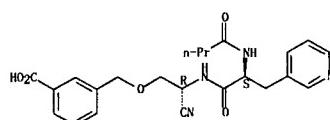
RN 225121-44-8 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(4-methoxyphenyl)-1-oxo-2-[(tetrahydro-2-furanyl)carbonyl]amino]propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-45-9 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-1-oxo-2-[(1-oxobutyl)amino]-3-(3-pyridinyl)propyl]amino]propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

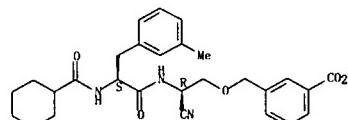
Absolute stereochemistry.



RN 225121-46-0 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-1-oxo-3-(3-pyridinyl)-2-[(tetrahydro-2-furanyl)carbonyl]amino]propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

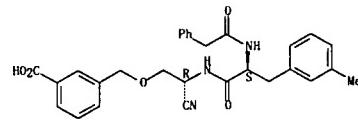
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



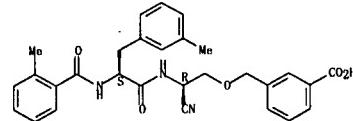
RN 225121-50-6 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(phenyl)amino]propyl]amino]ethoxy)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



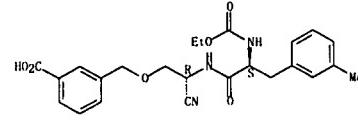
RN 225121-51-7 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2-methylbenzoyl)amino]-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-52-8 CAPLUS  
CN Benzoic acid, 3-[(2R, 7S)-4-cyano-7-(3-methylphenyl)methyl]-6,9-dioxa-2,10-dioxa-5,8-diazadodec-1-yl]- (CA INDEX NAME)

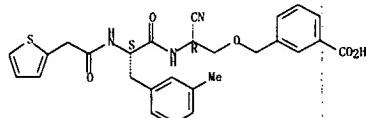
Absolute stereochemistry.



## L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

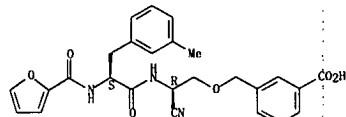
RN 225121-53-9 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(2-thienylacetyl)amino]propyl]amino]ethoxy)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



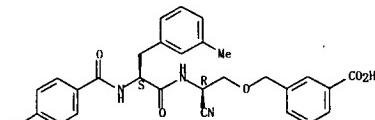
RN 225121-54-0 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2-furanylcarbonyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



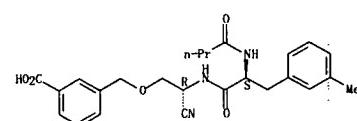
RN 225121-55-1 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(4-chlorobenzoyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]2-cyanoethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



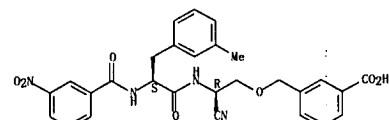
RN 225121-56-2 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(3,5-bis(trifluoromethyl)benzoyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]2-cyanoethoxy)methyl]- (CA INDEX NAME)

## L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



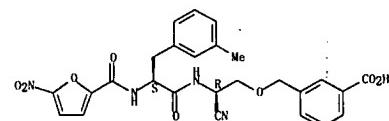
RN 225121-60-8 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-2-[(3-nitrobenzoyl)amino]-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



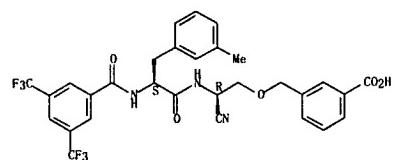
RN 225121-61-9 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-2-[(5-nitro-2-furyl)carbonyl]amino]-1-oxopropyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



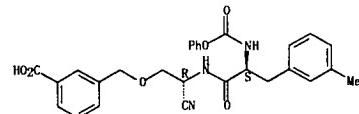
RN 225121-62-0 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(4-bromobenzoyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]2-cyanoethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 Absolute stereochemistry.

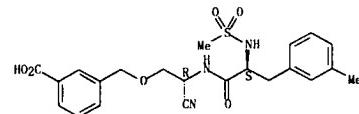
RN 225121-57-3 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(phenoxy carbonyl)amino]propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-58-4 CAPLUS  
 CN Benzoic acid, 3-[(4R,7S)-4-cyano-7-[(3-methylphenyl)methyl]-9,9-dioxido-6-oxo-2-oxa-9-thia-5,8-diazadec-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.

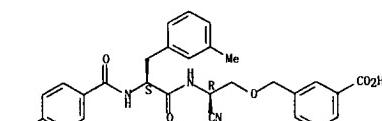


RN 225121-59-5 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(1-oxobutyl)amino]propyl]amino]ethoxy)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

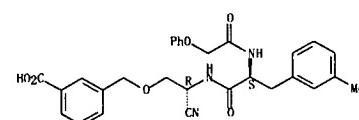
## L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

## L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



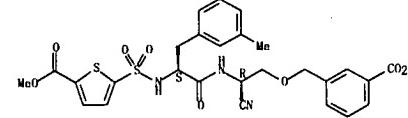
RN 225121-63-1 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-1-oxo-2-[(phenoxy acetyl)amino]propyl]amino]ethoxy)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-64-2 CAPLUS  
 CN 2-Thiophene carboxylic acid, 5-[[[(1S)-2-[(1R)-2-[(3-carboxyphenyl)methoxy]-1-cyanoethyl]amino]-1-(3-methylphenyl)methyl]-2-oxethyl]amino]sulfonyl]-2-methyl ester (CA INDEX NAME)

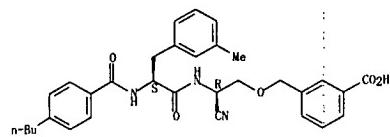
Absolute stereochemistry.



RN 225121-65-3 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(4-butylbenzoyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]2-cyanoethoxy)methyl]- (CA INDEX NAME)

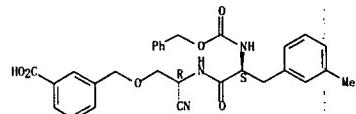
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



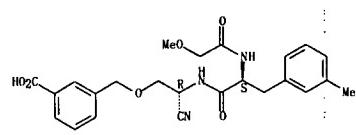
RN 225121-66-4 CAPLUS  
CN Benzoic acid, 3-[{(4R,7S)-4-cyano-7-[(3-methylphenyl)methyl]-6,9-dioxo-11-phenyl-2,10-dioxa-5,8-diazadodec-1-yl}]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-67-5 CAPLUS  
CN Benzoic acid, 3-[(4R,7S)-4-cyano-7-[(3-methylphenyl)methyl]-6,9-dioxo-2,11-dioxa-5,8-diazadodec-1-yl}]- (CA INDEX NAME)

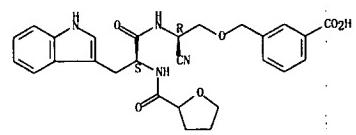
Absolute stereochemistry.



RN 225121-68-6 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-2-[(1-naphthalenyl)sulfonyl]amino]-1-oxopropyl]amino]ethoxy]methyl}- (CA INDEX NAME)

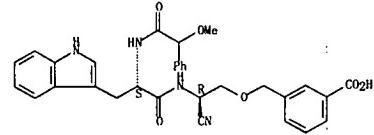
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



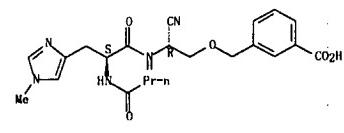
RN 225121-72-2 CAPLUS  
CN Benzoic acid, 3-[(4R,7S)-4-cyano-7-(1H-indol-3-ylmethyl)-6,9-dioxo-10-phenyl-2,11-dioxa-5,8-diazadodec-1-yl}]- (CA INDEX NAME)

Absolute stereochemistry.



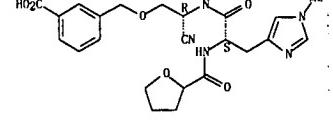
RN 225121-73-3 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(1-methyl-1H-imidazol-4-yl)-1-oxo-2-(1-oxobutyl)amino]propyl]amino]ethoxy]methyl}- (CA INDEX NAME)

Absolute stereochemistry.

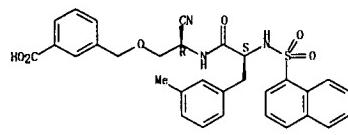


RN 225121-74-4 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(1-methyl-1H-imidazol-4-yl)-1-oxo-2-[(tetrahydro-2-furanyl)carbonyl]amino]propyl]amino]ethoxy]methyl}- (CA INDEX NAME)

Absolute stereochemistry.

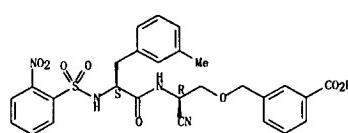


L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



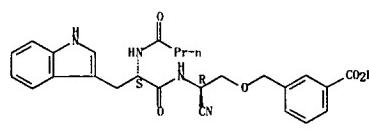
RN 225121-69-7 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3-methylphenyl)-2-[(2-nitrophenyl)sulfonyl]amino]-1-oxopropyl]amino]ethoxy]methyl}- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-70-0 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(1H-indol-3-yl)-1-oxo-2-(1-oxobutyl)amino]propyl]amino]ethoxy]methyl}- (CA INDEX NAME)

Absolute stereochemistry.



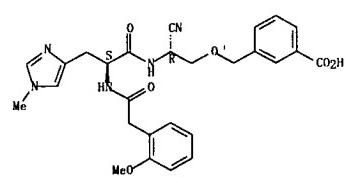
RN 225121-71-1 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(1H-indol-3-yl)-1-oxo-2-[(1-tetrahydro-2-furanyl)carbonyl]amino]propyl]amino]ethoxy]methyl}- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 225121-75-5 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2-methoxyphenyl)acetyl]amino]-3-(1-methyl-1H-imidazol-4-yl)-1-oxopropyl]amino]ethoxy]methyl}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

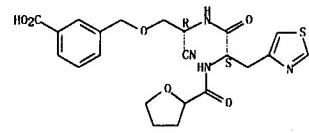


RN 225121-77-7 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-1-oxo-2-[(tetrahydro-2-furanyl)carbonyl]amino]-3-(4-thiazolyl)propyl]amino]ethoxy]methyl}- nono(trifluoroacetate) (9CI) (CA INDEX NAME)

CN I

CRN 225121-76-6  
CMF C22 H24 N4 O6 S

Absolute stereochemistry.



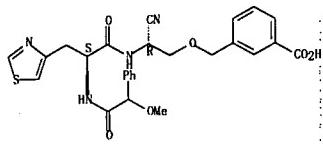
CN 2

CRN 76-05-1  
CMF C2 H F3 O2



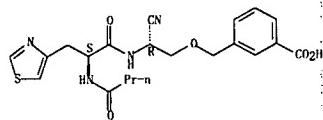
RN 225121-78-8 CAPLUS  
CN Benzoic acid, 3-[(4R,7S)-4-cyano-6,9-dioxo-10-phenyl)-7-(4-thiazolylmethyl)-2,11-dioxa-5,8-diazadodec-1-yl}]- (CA INDEX NAME)

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
Absolute stereochemistry.



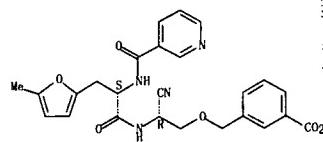
RN 225121-79-9 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-1-oxo-2-[(1-oxobutyl)amino]-3-(4-thiazolyl)propyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-80-2 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(5-methyl)-2-furanyl]-1-oxo-2-[(3-pyridinylcarbonyl)amino]propyl]amino]ethoxy]methyl]- (CA INDEX NAME)

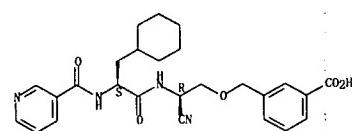
Absolute stereochemistry.



RN 225121-81-3 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(1,3-benzodioxol-5-ylcarbonyl)amino]-3-(5-methyl-2-furanyl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

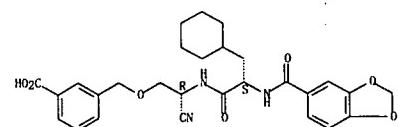
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



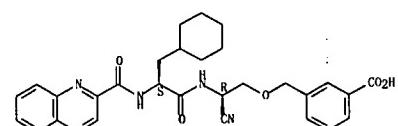
RN 225121-85-7 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(1,3-benzodioxol-5-ylcarbonyl)amino]-3-cyclohexyl-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-86-8 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-cyclohexyl-1-oxo-2-[(2-quinoxalinyl)carbonyl]amino]propyl]amino]ethoxy]methyl]- (CA INDEX NAME)

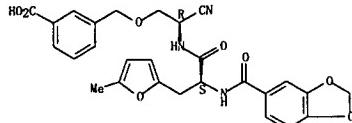
Absolute stereochemistry.



RN 225121-87-9 CAPLUS  
CN Benzoic acid, 3-[(3S)-3-cynno-3-[(2S)-2-[(diphenylacetyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]propoxy]- (9CI) (CA INDEX NAME)

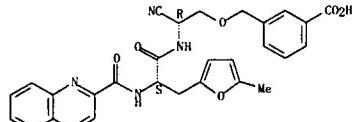
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



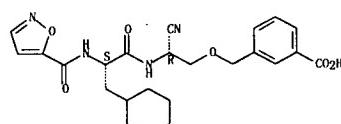
RN 225121-82-4 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(5-methyl-2-furanyl)-1-oxo-2-[(2-quinoxalinyl)carbonyl]amino]propyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-83-5 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-cyclohexyl-1-oxopropyl]amino]-2-(5-isoxazolyl)carbonyl]amino]ethoxy]methyl]- (CA INDEX NAME)

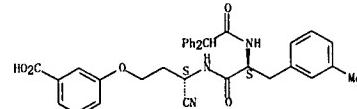
Absolute stereochemistry.



RN 225121-84-6 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-cyclohexyl-1-oxo-2-[(3-pyridinyl)carbonyl]amino]propyl]amino]ethoxy]methyl]- (CA INDEX NAME)

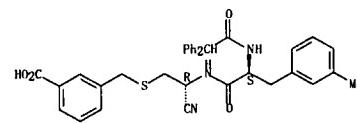
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



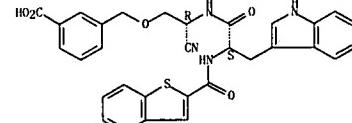
RN 225121-89-1 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(diphenylacetyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



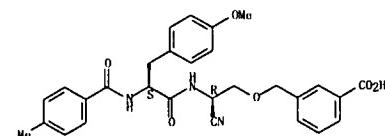
RN 225121-92-6 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(benzo[b]thien-2-yl)carbonyl]amino]-3-(1H-indol-3-yl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-93-7 CAPLUS  
CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(4-methoxyphenyl)-2-[(4-methylbenzoyl)amino]-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

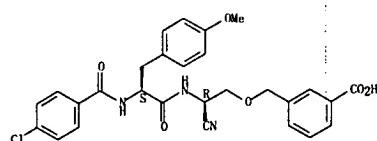
Absolute stereochemistry.



L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

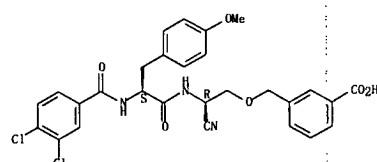
RN 225121-94-8 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[4-chlorobenzoyl]amino]-3-(4-methoxyphenyl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



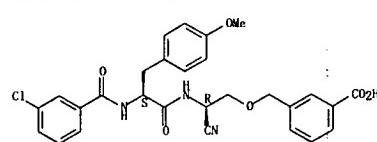
RN 225121-95-9 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[3,4-dichlorobenzoyl]amino]-3-(4-methoxyphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-96-0 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[3-chlorobenzoyl]amino]-3-(4-methoxyphenyl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

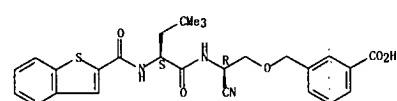


RN 225121-97-1 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[4-chlorobenzoyl]amino]-3-cyclohexyl-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

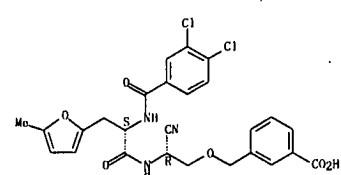
RN 225122-01-0 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(benzo[b]thien-2-ylcarbonyl)amino]-4,4-dimethyl-1-oxopentyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225122-02-1 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[3,4-dichlorobenzoyl]amino]-3-(5-methyl-2-furyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

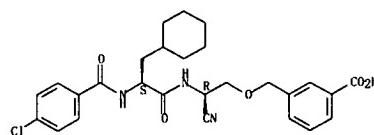


RN 225122-03-2 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-cyclohexyl-2-[(4-methylbenzoyl)amino]-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

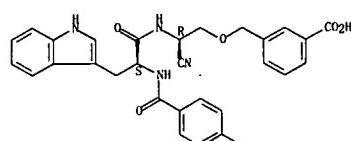
L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

Absolute stereochemistry.



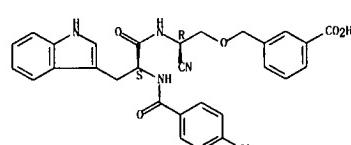
RN 225121-98-2 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(1H-indol-3-yl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225121-99-3 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-(4-chlorobenzoyl)amino]-3-(1H-indol-3-yl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

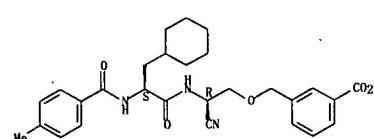
Absolute stereochemistry.



RN 225122-00-9 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[3,4-dichlorobenzoyl]amino]-3-(1H-indol-3-yl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

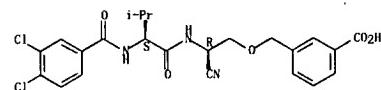
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



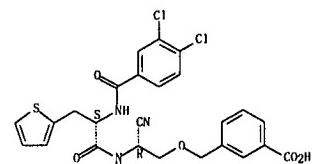
RN 225122-04-3 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[3,4-dichlorobenzoyl]amino]-3-(1H-indol-3-yl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225122-05-4 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[3,4-dichlorobenzoyl]amino]-3-(1-oxo-3-(2-thienyl)propyl)amino]ethoxy]methyl]- (CA INDEX NAME)

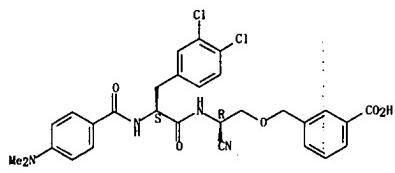
Absolute stereochemistry.



RN 225122-06-5 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3,4-dichlorophenyl)-2-[(4-dimethylamino)benzoyl]amino]-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

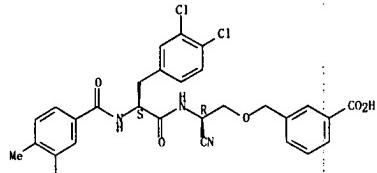
Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



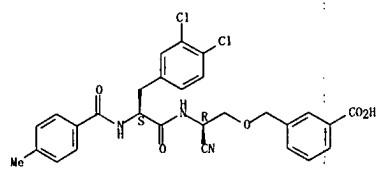
RN 225122-07-6 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3,4-dichlorophenyl)-2-[(3,4-dimethylbenzoyl)amino]-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225122-08-7 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-3-(3,4-dichlorophenyl)-2-[(4-methylbenzoyl)amino]-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

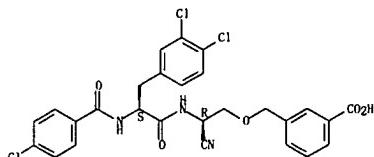
Absolute stereochemistry.



RN 225122-09-8 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(4-chlorobenzoyl)amino]-3-(3,4-dichlorophenyl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

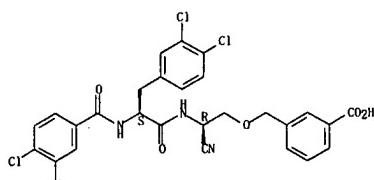
L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

Absolute stereochemistry.



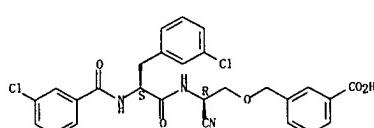
RN 225122-10-1 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(3,4-dichlorophenyl)amino]-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225122-11-2 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(3-chlorobenzoyl)amino]-3-(3-chlorophenyl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

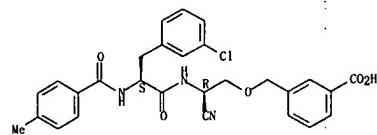
Absolute stereochemistry.



RN 225122-12-3 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-3-(3-chlorophenyl)-2-[(4-methylbenzoyl)amino]-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

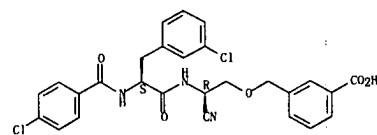
L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

Absolute stereochemistry.



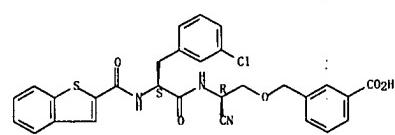
RN 225122-13-4 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(4-chlorobenzoyl)amino]-3-(3-chlorophenyl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225122-14-5 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-2-[(benzo[b]thien-2-ylcarbonyl)amino]-3-(3-chlorophenyl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

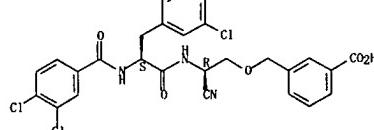


RN 225122-15-6 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-3-(3-chlorophenyl)-2-[(3,4-dichlorobenzoyl)amino]-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

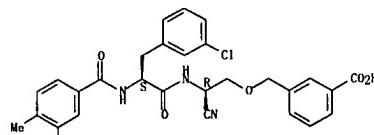
L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

Absolute stereochemistry.



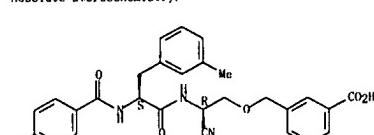
RN 225122-16-7 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-[(2S)-3-(3-chlorophenyl)-2-[(3,4-dimethylbenzoyl)amino]-1-oxopropyl]amino]-2-cyanoethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 225122-17-8 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(4-fluorobenzoyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

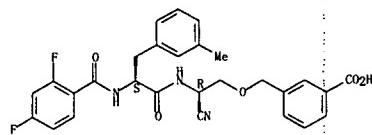
Absolute stereochemistry.



RN 225122-18-9 CAPLUS  
 CN Benzoic acid, 3-[(2R)-2-cyano-2-[(2S)-2-[(2,4-difluorobenzoyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]ethoxy]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



IT 225122-60-1P 225122-61-2P 225122-64-5P

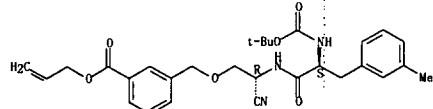
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reagent or reagent mixture)

(synthesis of dipeptide nitriles as inhibitors of cysteine cathepsins)

RN 225122-60-6 CAPLUS

CN Benzoic acid, 3-[{4(R,7S)-4-cyano-11,11-dimethyl-7-[(3-methylphenyl)methyl]-6,9-dioxa-2,10-dioxa-5,8-diazadodec-1-yl}-, 2-propenyl ester (9CI) (CA INDEX NAME)

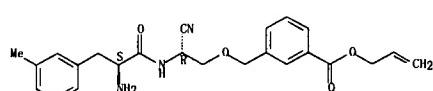
Absolute stereochemistry.



RN 225122-61-2 CAPLUS

CN Benzoic acid, 3-[{(2R)-2-[(2S)-2-amino-3-(3-methylphenyl)-1-oxopropyl]amino]-2-cyanoethoxy]methyl-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 225122-64-5 CAPLUS

CN Benzoic acid, 3-(3-amino-3-cyanopropoxy)-, methyl ester (CA INDEX NAME)

L4 ANSWER 49 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996-569059 CAPLUS

DOCUMENT NUMBER: 125:301511

TITLE: Enantiomerically pure  $\alpha$ -fluoroalkyl- $\alpha$ -amino acids: synthesis of (R)- $\alpha$ -difluoromethylalanine and (S)- $\alpha$ -difluoromethylserine

AUTHOR(S): Bravo, Pierfrancesco; Capelli, Silvia; Meille, Stefano V.; Seresini, Paolo; Volonterio, Alessandro; Zanda, Matteo

CORPORATE SOURCE: C.N.R., Dip. Chimia Politecnico Milano, Centro Studio Sostanze Organiche Naturali, Milano, I-20131, Italy

SOURCE: Tetrahedron Asymmetry (1996), 7(8), 2321-2332

CODEN: TASYE3 ISSN: 0957-4166

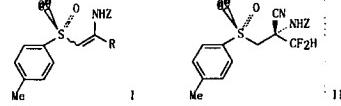
PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 125:301511

GRAPHIC IMAGE:



## ABSTRACT:

Hydrocyanation of enantiomerically pure N-Cbz  $\alpha$ -fluoroalkyl  $\beta$ -sulfinylamines (I: R = F3C, CF2H, CF2Cl) occurs smoothly by treatment with KCN or by addition of Me3SiCN or (EtO)2P(O)CN to preformed sodium derivs. of I. The diastereoisomeric difluoro- $\alpha$ -aminonitriles (II) have been converted to the unnatural amino acids (R)- $\alpha$ -difluoromethylalanine and (S)- $\alpha$ -difluoromethylserine.

IT 182998-18-1P 183075-51-6P

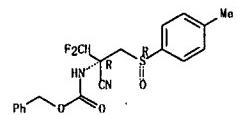
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reagent or reagent mixture)

(synthesis of (R)- $\alpha$ -difluoromethylalanine and (S)- $\alpha$ -difluoromethylserine)

RN 182998-18-1 CAPLUS

CN Carbamic acid, [(1-cyano-2,2-difluoro-1-[(4-methylphenyl)sulfinyl]methyl]ethyl-, phenylmethyl ester, [R-(R\*,R\*)]- (9CI) (CA INDEX NAME)

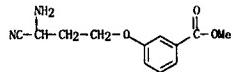
Absolute stereochemistry. Rotation (+).



RN 183075-51-6 CAPLUS

CN Carbamic acid, [(1-cyano-2,2-difluoro-1-[(4-methylphenyl)sulfinyl]methyl]ethyl-, phenylmethyl ester, [R-(R\*,S\*)]- (9CI) (CA INDEX NAME)

L4 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



IT 225122-65-6P

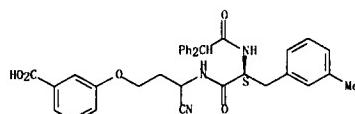
RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of dipeptide nitriles as inhibitors of cysteine cathepsins)

RN 225122-65-6 CAPLUS

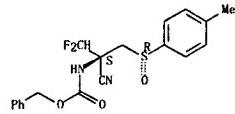
CN Benzoic acid, 3-[{(2S)-2-[(diphenylacetyl)amino]-3-(3-methylphenyl)-1-oxopropyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 49 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

Absolute stereochemistry. Rotation (+).



IT 182998-08-9P 182998-29-4P 183075-50-5P

183075-52-7P

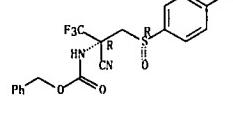
RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of (R)- $\alpha$ -difluoromethylalanine and (S)- $\alpha$ -difluoromethylserine)

RN 182998-08-9 CAPLUS

CN Carbamic acid, [(1-cyano-2,2-trifluoro-1-[(4-methylphenyl)sulfinyl]methyl]ethyl-, phenylmethyl ester, [R-(R\*,R\*)]- (9CI) (CA INDEX NAME)

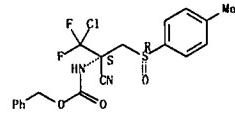
Absolute stereochemistry.



RN 182998-29-4 CAPLUS

CN Carbamic acid, [(2-chloro-1-cyano-2,2-difluoro-1-[(4-methylphenyl)sulfinyl]methyl]ethyl-, phenylmethyl ester, [R-(R\*,S\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

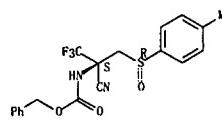


RN 183075-50-5 CAPLUS

CN Carbamic acid, [(1-cyano-2,2,2-trifluoro-1-[(4-methylphenyl)sulfinyl]methyl]ethyl-, phenylmethyl ester, [R-(R\*,S\*)]- (9CI) (CA INDEX NAME)

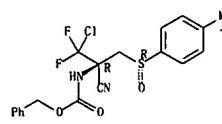
Absolute stereochemistry.

L4 ANSWER 49 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 183075-52-7 CAPLUS  
 CN Carbamic acid, [2-chloro-1-cyano-2,2-difluoro-1-[(4-methylphenyl)sulfinyl]methyl]-, phenylmethyl ester, [R-(R\*,R\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



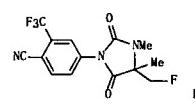
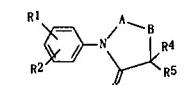
L4 ANSWER 50 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1995-951197 CAPLUS  
 DOCUMENT NUMBER: 123:340123  
 TITLE: Preparation of phenylimidazolidines as antiandrogenics  
 INVENTOR(S): Claußner, André; Goubet, François; Teutsch, Jean-Georges  
 PATENT ASSIGNEE(S): Roussel-UCLAF, Fr.  
 SOURCE: PCT Int. Appl., 96 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9518794	A1	19950713	WO 1995-FR4	19950104
W: AU, BR, CA, CN, FI, HU, JP, KR, RU, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2715402	A1	19950728	FR 1994-42	19940105
FR 2715402	B1	19961004		
FR 2724169	A1	19960308	FR 1994-10660	19940906
FR 2724169	B1	19970103		
TW 521073	B	20030221	TW 1994-83111272	19941205
IL 111908	A	20030529	IL 1994-111908	19941207
CA 2180379	A1	19950713	CA 1995-2180379	19950104
AU 9514573	A	19950801	AU 1995-14573	19950104
AU 687152	B2	19980219		
EP 738263	A1	19961023	EP 1995-906361	19950104
EP 738263	B1	20010404		
AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CN 1141651	A	19970729	CN 1995-191761	19950104
CN 1113873	B	20030709		
JP 09507241	T	19970722	JP 1995-518337	19950104
HU 76299	A2	19970728	HU 1996-1836	19950104
BR 9506457	A	19971007	BR 1995-6457	19950104
RU 2152934	C1	20000720	RU 1996-116993	19950104
AT 200281	T	20010415	AT 1995-906361	19950104
ES 2156204	T3	20010616	ES 1995-906361	19950104
PT 738263	T	20010830	PT 1995-906361	19950104
ZA 9500057	A	19960105	ZA 1995-57	19950105
US 5750553	A	19980512	US 1996-669419	19960627
F1 9602754	A	19960704	F1 1996-2754	19960704
F1 112475	B1	20031215		
GR 3035853	T3	20010831	GR 2001-400704	20010511
PRIORITY APPLN. INFO.:			FR 1994-42	A 19940105
			FR 1994-10660	A 19940906
			WO 1995-FR4	W 19950104

OTHER SOURCE(S): MARPAT 123:340123

GRAPHIC IMAGE:

L4 ANSWER 50 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

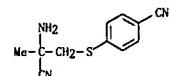


ABSTRACT:  
 Title compds. [I]: AB = C(X)NR3, C(SR)2N; R = alk(en)yl, aryl(alkyl), etc.; R1, R2 = cyano, NO2, halo, CF3, etc.; R3 = H, groups cited for R; R4, R5 = H, (un)substituted alkyl, etc.; X = O or S; Y = O, S, NH) were prepared. Thus, 84% inhibition of ornithine decarboxylase prepared from castrated mice receiving testosterone propionate and 1.5mg/kg prepared title compound II s.c. was observed.

IT 170860-96-5P  
 RL: RCL (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reagent or reagent)  
 (preparation of phenylimidazolidines as antiandrogenics)

RN 170860-96-5 CAPLUS

CN Benzonitrile, 4-[(2-amino-2-cyanopropyl)thio]- (CA INDEX NAME)



L4 ANSWER 51 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995-763507 CAPLUS  
 DOCUMENT NUMBER: 123:170178  
 TITLE: Amino acid amide derivative, agrohorticultural bactericide, and production process

INVENTOR(S): Shibata, Masuru; Sugiyama, Kazuhiko; Yonekura, Norihisa; Sakai, Junetsu; Kojima, Yoshiuki; Hayashi, Shigeru

PATENT ASSIGNEE(S): Kumai Chemical Industry Co., Ltd., Japan; Ihara Chemical Industry Co., Ltd.

SOURCE: PCT Int. Appl., 134 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9425432	A1	19941110	WO 1994-JP708	19940427
W: BR, CN, PL, RO, RU, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 648740	A1	19950419	EP 1994-914561	19940427
EP 648740	B1	19970108		
R: DE, ES, FR, GB, IT, PL, PT, SE				
CN 1128863	A	19950920	CN 1994-190249	19940427
CN 1128863	B	20020123		
RO 1078204	B3	19980130	RO 1994-2120	19940427
RU 2128186	C1	19990327	RU 1994-46335	19940427
PL 175906	B1	19990331	PL 1994-306836	19940427
BR 9405281	A	19990831	BR 1994-5281	19940427
JP 07010825	A	19950113	JP 1994-114345	19940428
JP 3672944	B2	20050720		
CA 2180000	A1	19960509	CA 1994-2180000	19941027
CA 2180000	C	20000627		
US 5574064	A	19961112	US 1994-356316	19941228
US 5574064	A	19980303	US 1996-678299	19960711
US 5723469	A	19980527	JP 1993-125455	A 19930428
PRIORITY APPLN. INFO.:			JP 1994-JP708	W 19940427
			US 1994-356316	A3 19941228

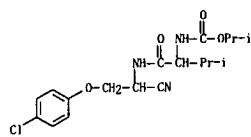
OTHER SOURCE(S): CASREACT 123:170178; MARPAT 123:170178

ABSTRACT:  
 Title compds. RI-Z1-C(=Z2)NH-CHR2-CO-NH-CHR3-R = 2-(CR7R8)n-Q [I]; RI = alky, alkenyl, alkynyl, etc.; R2 = Et, Pr, iso-Pr, iso-Bu, sec-Bu, tert-Bu, alkenyl, cycloalkyl, etc.; R3 = H, alkyl, alkenyl, Ph, alkoxycarbonyl, cyano; Z1, Z2 = H, S; Z3 = H, S, (un)substituted imino, etc.; m = 0-2 integer; n = 0-1] are prepared. Thus, 1-methyl-2-(4-nitrophenoxyl)ethylamine was added to a mixture of N-tert-butoxycarbonyl-L-valine, CH2Cl2, N-methylpyridine, and iso-Bu chloroformate at -60° and the resulting mixture was allowed to react at room temperature for 15 h to give 55% N2-tert-butoxycarbonyl-N1-[1-methyl-2-(4-nitrophenoxyl)ethyl]-L-valinamide. I have a high control effect on downy mildew of cucumber, diseases of tomato and downy mildew of grape. Further it is excellent in the capability of penetration and migration, residual effect and rainfall resistance without causing crop injury.

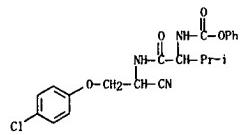
IT 167087-41-4P 167087-42-5P  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); B1OL (Biological study); PREP (Preparation); USES (Uses) (amino acid amide derivative, agrohorticultural bactericide, and production process)

RN 167087-41-4 CAPLUS  
 CN Carbamic acid, [[[[2-(4-chlorophenoxy)-1-cyanoethyl]amino]carbonyl]-2-methylpropyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 51 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



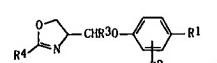
RN 167087-42-5 CAPLUS  
 CN Carbamic acid, [1-[[2-(4-chlorophenoxy)-1-cyanoethyl]amino]carbonyl]-2-methylpropyl]- phenyl ester (9CI) (CA INDEX NAME)



PRIORITY APPLN. INFO.: OTHER SOURCE(S): CASREACT 120:54537; MARPAT 120:54537

L4 ANSWER 52 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1994:54537 CAPLUS  
 DOCUMENT NUMBER: 120:54537  
 TITLE: Preparation of 4-(phenoxyalkyl)-2-oxazolines as acaricides and insecticides  
 INVENTOR(S): Hirose, Taro; Kisida, Hiroshi; Saito, Shigeru; Fujimoto, Hiroaki  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl. 53 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 553623	A1	19930804	EP 1993-100223	19930108
EP 553623	B1	20010404		
R: CH, DE, ES, FR, GB, IT, LI AU 9230491 AU 658955 ES 2155442 BR 9300299 JP 05271206 JP 3239508 US 5411979	A	19930729 19950504 20010516 A A B2	AU 1992-30491 ES 1993-100223 BR 1993-299 JP 1993-11698 US 1993-10015 US 19950502	19921231 19930108 19930127 19930127 A 19930127
PRIORITY APPLN. INFO.: OTHER SOURCE(S): CASREACT 120:54537; MARPAT 120:54537				A 19920128

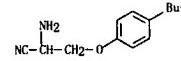


ABSTRACT:  
 Title compds. [I: H, halo, (halo)alkyl, alkoxy, etc.; R2 = H, halo, alkyl, alkoxy, alkylthio; R3 = H, Me; R4 = (substituted) Ph; p = 1-4] were prepared. Thus, 4-(Me3C)C6H4OH was condensed with BrCH2CH(Me)2 and the product converted in 4 steps to 4-(Me3C)C6H4OCH2CH(NH2)CH2OH which was cyclized and condensed with 2,6-dichlorobenzoic acid to give I (R1 = CMe3, R2 = R3 = H, R4 = C6H5F2-2,6) which gave >90% control of Culex pipiens pallens larvae in H2O containing 3.5 ppm.

IT 151857-00-PP 151857-10-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, in preparation of acaricide and insecticide)

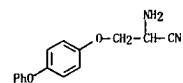
RN 151857-09-4 CAPLUS

CN Propanenitrile, 2-amino-3-[4-(1,1-dimethylethyl)phenoxy]- (CA INDEX NAME)



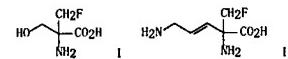
L4 ANSWER 52 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 151857-10-2 CAPLUS  
 CN Propanenitrile, 2-amino-3-(4-phenoxyphenoxy)- (CA INDEX NAME)



L4 ANSWER 53 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:650429 CAPLUS  
 DOCUMENT NUMBER: 119:250429  
 TITLE: A versatile entry into the synthesis of  $\alpha$ -(monofluoromethyl) amino acids: preparation of  $\alpha$ -(monofluoromethyl)serine and (E)-dehydro- $\alpha$ -(monofluoromethyl)ornithine  
 AUTHOR(S): Van Hijfte, Luc; Heydt, Veronique; Kolb, Michael  
 CORPORATE SOURCE: Strasbourg Res. Ctr., Marion Merrell Dow Res. Inst., Strasbourg, 67009, Fr.  
 SOURCE: Journal of Fluorine Chemistry (1993), 34(30), 479-6  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 119:250429  
 GRAPHIC IMAGE:

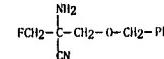


ABSTRACT:  
 A new entry to the synthesis of  $\alpha$ -(monofluoromethyl) amino acids is described. The synthesis is based on a Strecker reaction on an  $\alpha$ -(monofluoromethyl) ketone. As an example,  $\alpha$ -(monofluoromethyl)serine I was synthesized and used as starting material for a new synthesis of (E)-dehydro- $\alpha$ -(monofluoromethyl)ornithine II.

IT 151028-29-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and hydrolysis of)

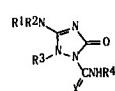
RN 151028-29-4 CAPLUS

CN Propionenitrile, 2-amino-2-(fluoromethyl)-3-(phenylmethoxy)- (CA INDEX NAME)



L4 ANSWER 54 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1993:191742 CAPLUS  
 DOCUMENT NUMBER: 118:191742  
 TITLE: Preparation of 5-amino-2-carbamoyltriazolin-3-ones as herbicides  
 INVENTOR(S): Fiedeisen, Kurt; Kuhnt, Dietmar; Mueller, Klaus; Helmut; Koenig, Klaus; Luerssen, Klaus; Santel, Hans; Joachim; Schmidt, Robert Rudolf  
 PATENT ASSIGNEE(S): Bayer A.-G., Germany  
 SOURCE: Ger. Offen., 56 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

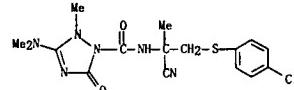
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4116115	A1	19921119	DE 1991-4116115	19910517
WO 9220663	A1	19921126	WO 1992-EP968	19920504
W: AU, BR, CA, CS, HU, JP, KR, RU, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
AU 9216800	A	19921230	AU 1992-16800	19920504
AU 655019	B2	19941201		
EP 586418	A1	19940316	EP: 1992-909880	19920504
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
BR 9205999	A	19940927	BR 1992-5999	19920504
PRIORITY APPLN. INFO.: DE 1991-4116115 A 19910517				
OTHER SOURCE(S): MARPAT 118:191742				
GRAPHIC IMAGE:				



ABSTRACT:  
 Title compds. I [R1, R2 = (substituted) alkyl, -aryl, -heteroaryl, etc.; R1R2N = (substituted) heterocycl; R3 = (cyclo)alkyl; R4 = (substituted) alkyl, -cycloalkyl, -aryl, -acetyl, alkoxy, etc.; X = O, S] were prepared as herbicides (no data). Thus, addition reaction of 1-methyl-5-(R3)-1,2-dihydro-4-triazol-3-one (preparation given) with 4-MeC6H4CH2CH2C6HMeCO in MeCN containing DBU gave title compound I [R1 = Et; R2 = R3 = Me; R4 = C(Me)2CH2C6H4Me-4; X = O] (II) in 81% yield. Numerous I were said to be superior postemergent herbicides.

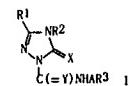
IT 146229-87-OP  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses (preparation of, as herbicide))  
 RN 146229-87-0 CAPLUS  
 CN 1H-1,2,4-Triazole-1-carboxamide, N-[2-[(4-chlorophenyl)thio]-1-cyano-1-methylethyl]-3-(dimethylamino)-2,5-dihydro-2-methyl-5-oxo- (CA INDEX NAME)

L4 ANSWER 54 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 55 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1993:101965 CAPLUS  
 DOCUMENT NUMBER: 118:101965  
 TITLE: Preparation of substituted triazolinones as herbicides  
 INVENTOR(S): Fiedeisen, Kurt; Kuhnt, Dietmar; Mueller, Klaus; Helmut; Koenig, Michael; Koenig, Klaus; Luerssen, Klaus; Santel, Hans; Joachim; Schmidt, Robert R.  
 PATENT ASSIGNEE(S): Bayer A.-G., Germany  
 SOURCE: Eur. Pat. Appl., 34 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

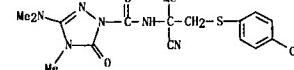
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 513621	A1	19921119	EP 1992-107530	19920504
R: BE, CH, DE, DK, ES, FR, GB, IT, LI, NL				
DE 4115618	A1	19921119	DE 1991-4115618	19910514
AU 9215912	A	19921119	AU 1992-15912	19920430
AU 644055	B2	19931202		
US 5209769	A	19930511	US 1992-878149	19920504
JP 05194435	A	19930803	JP 1992-141065	19920507
CA 2068356	A1	19921115	CA 1992-2068356	19920511
BR 9201807	A	19921229	BR 1992-1807	19920513
PRIORITY APPLN. INFO.: DE 1991-4115618 A 19910514				
OTHER SOURCE(S): MARPAT 118:101965				
GRAPHIC IMAGE:				



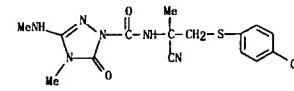
ABSTRACT:  
 Title compds. I [R1 = NR4R5, SR6; R2 = alkyl; R3 = (substituted) aryl, -cycloalkyl, -heterocycl; A = CR7R8CR9R10(CR11)(CR12)-, CR7R8CR13; CR7R8C, tlp.bond. and C, CR7R8N; X = O, S; R4 = H, -alkyl; R5, R6 = alkyl; R7 = H, -cyano- (Y) and R8-R10 = alkyl, -alkenyl; n = n = 0-2; p = 2-6] were prepared as herbicides. The treatment of 1-(4-chlorophenoxy)-2-propylamine with COCl2 gave the isocyanate. Addition of 3-dimethylamino-4-methyl-1,2,4-triazolin-5-one in the presence of DBU gave title compound I [R1 = Me2N; R2 = Me; R3 = 4-C1C6H4H: A = C(Me)2CH2O; X = Y = O] (II) in 84% yield. II is effective both pre- and postemergent.

IT 146015-67-OP 146015-82-99 146015-83-OP  
 146015-84-IP  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses (preparation of, as herbicide))  
 RN 146015-67-0 CAPLUS  
 CN 1H-1,2,4-Triazole-1-carboxamide, N-[2-[(4-chlorophenyl)thio]-1-cyano-1-methylethyl]-3-(dimethylamino)-4,5-dihydro-4-methyl-5-oxo- (CA INDEX NAME)

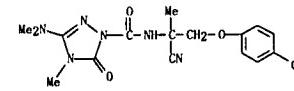
L4 ANSWER 55 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



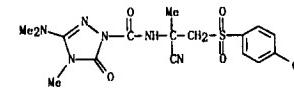
RN 146015-82-9 CAPLUS  
 CN 1H-1,2,4-Triazole-1-carboxamide, N-[2-[(4-chlorophenyl)thio]-1-cyano-1-methylethyl]-4,5-dihydro-4-methyl-5-oxo- (CA INDEX NAME)



RN 146015-83-0 CAPLUS  
 CN 1H-1,2,4-Triazole-1-carboxamide, N-[2-(4-chlorophenoxy)-1-cyano-1-methylethyl]-3-(dimethylamino)-4,5-dihydro-4-methyl-5-oxo- (CA INDEX NAME)

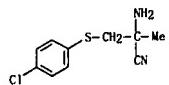


RN 146015-84-1 CAPLUS  
 CN 1H-1,2,4-Triazole-1-carboxamide, N-[2-[(4-chlorophenyl)sulfonyl]-1-cyano-1-methylethyl]-3-(dimethylamino)-4,5-dihydro-4-methyl-5-oxo- (CA INDEX NAME)



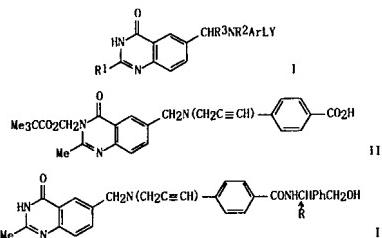
IT 146016-17-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as intermediate for herbicides)  
 RN 146016-17-3 CAPLUS  
 CN Propenonitrile, 2-amino-3-[(4-chlorophenyl)thio]-2-methyl- (CA INDEX NAME)

L4 ANSWER 55 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 56 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:194334 CAPLUS  
 DOCUMENT NUMBER: 116:194334  
 TITLE: Preparation of [(quinazolinylmethyl)amino]benzamides and related compounds as antitumor agents  
 INVENTOR(S): Andrew, Robert George; Barker, Andrew John; Boyle, Francis Thomas; Wardleworth, James Michael  
 PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK; National Research Development Corp.  
 SOURCE: Eur. Pat. Appl., 58 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 459730	A2	19911204	EP 1991-304757	19910524
EP 459730	A3	19930120		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AU 9177075	A	19911205	AU 1991-77075	19910516
AU 640016	B2	19930812		
ZA 9103730	A	19920226	ZA 1991-3730	19910516
CA 2042922	A1	19911201	CA 1991-2042922	19910521
HU 57739	A2	19911230	HU 1991-1768	19910527
NO 9102071	A	19911201	NO 1991-2071	19910529
JP 04235173	A	19920824	JP 1991-26060	19910529
FI 1991-2600	A	19911201	FI 1991-2600	19910530
GB 2244708	A	19911211	GB 1991-11656	19910530
GB 2244709	B	19931208		
US 5280027	A	19940118	US 1991-708046	19910530
PRIORITY APPLN. INFO. : MARPAT 116:194334				
OTHER SOURCE(S) :				
GRAPHIC IMAGE:				



## ABSTRACT:

L4 ANSWER 56 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 Title compd. I [R1 = H, NH2, Cl-4 alkyl, Cl-4 alkoxy, substituted Cl-3 alkyl, Cl-3 hydroxalkoxy, Cl-4 alkoxyalkoxy, etc.]: quinazoline ring may have one more substituent; R2 = H, Cl-4 alkyl, -alkenyl, -alkynyl, -hydroalkyl, -haloalkyl, -cyanoalkyl; R3 = H, Cl-3 alkyl; Ar = (substituted) phenylene, (substituted) heterocyclyc; L = CONH, NHCO, CONRA4, NR4CO, CH=CH, CO2; R4 = Cl-4 alkyl; Y = A1C85(A3'3)A2Y2; R5 = H, Cl-3 alkyl; A1,A2 = bond, Cl-4 alkylene; A3 = bond, (substituted) Cl-4 alkylene; Y2 = OH, NH2, cyano, halo, CF3, Cl-4 alkoxy, -(di)alkylamino, -haloalkyl, aryl, etc.; Y3 = Y2, SO3H, CONHOH, CONHN, etc.; with provisos were prep'd as antitumor agents. Thus, benzoic acid deriv. II (propn. given) was converted to the acid chloride, which was amidated by (-)-(2R)-2-amino-2-phenylethanol to give a protected amide, which was deprotected to give title compd. III. Another I [R1 = Me; R2 = propargyl; R3 = H; Ar = 1,4-phenylene; L = CONH; Y = Ph2CH] had IC50 of approx. 7 μM in vitro against L1210 leukemia cells.

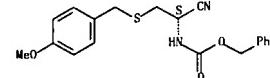
IT 140373-50-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as intermediate for antitumor agents)

RN 140373-50-8 CAPLUS

CN Carbanic acid, [1-cyano-2-[(4-methoxyphenyl)methyl]thio]ethyl]-, phenylmethyl ester, (S)- (9CI) (CA INDEX: NAME)

## Absolute stereochemistry.



L4 ANSWER 57 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:656601 CAPLUS  
 DOCUMENT NUMBER: 115:256601  
 TITLE: Preparation of 2-substituted vinylamino acid derivatives  
 AUTHOR(S): Opio, J. Osukui; Labidalle, S.; Galons, H.; Miocque, M.; Zaporozhets, A.; Loupy, A.  
 CORPORATE SOURCE: Lab. Chim. Org., Fac. Pharm., Paris, 75270, Fr.  
 SOURCE: Synthesis Communications (1991), 21(17), 1743-54  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S) : CASREACT 115:256601

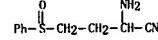
ABSTRACT:  
 Michael addition of imines RCHRIN:CPH2 (R = H, CH2CH2SOPh, R1 = CN, CO2Et; R = Me, Bu, CH2CH:CH2, R1 = CN) to acceptors H2C:CHR2 (R2 = SOPh, CN, CO2Et, COMe) under phase-transfer conditions in the absence of solvent gave adducts R2CH2CCRIN:CPH2 (I) in 50-95% yields. I (R1 = CN, R2 = SOPh) underwent thermolysis in refluxing xylene to give vinyl derivs. H2C:CHR(CN)N:CPH2 in 60-86% yields. I (R = CH2CH2SOPh, R1 = CN, R2 = SOPh) was converted into a,α-divinylglycine derivative BzNC(CH2CH2)2CO2Et by hydrolysis and thermolysis reactions.

IT 137283-23-9P 137283-26-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reagent or reagent)

(preparation and amidation of, with benzoyl chloride)

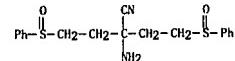
RN 137283-23-9 CAPLUS

CN Butanenitrile, 2-amino-4-(phenylsulfinyl)-, 2-[2-(phenylsulfinyl)ethyl]- (CA INDEX NAME)



RN 137283-26-2 CAPLUS

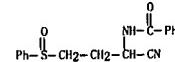
CN Butanenitrile, 2-amino-4-(phenylsulfinyl)-2-[2-(phenylsulfinyl)ethyl]- (CA INDEX NAME)

IT 137283-24-0P 137283-27-3P 137283-28-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reagent or reagent)

(preparation and thermolysis of)

RN 137283-24-0 CAPLUS

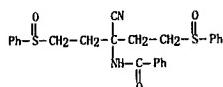
CN Benzamide, N-[1-cyano-3-(phenylsulfinyl)propyl]- (CA INDEX NAME)



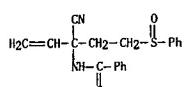
RN 137283-27-3 CAPLUS

CN Benzamide, N-[1-cyano-3-(phenylsulfinyl)-1-(2-

L4 ANSWER 57 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



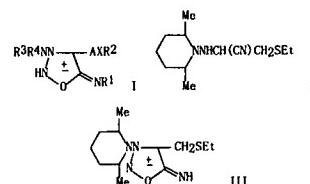
RN 137283-28-4 CAPLUS  
CN Benzamide, N-[1-cyano-1-[2-(phenylsulfinyl)ethyl]-2-propenyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 58 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1991:122388 CAPLUS  
DOCUMENT NUMBER: 114:122388  
TITLE: Antihypertensive aminosyndnonimines  
INVENTOR(S): Kujath, Eckard; Baumgariner, Christian; Schoenfänger, Karl; Beyerle, Rudi; Just, Melitta; Bohn, Helmut; Ostrowski, Joerg; Casselle, A.-G., Germany  
PATENT ASSIGNEE(S): Ger. Offen., 17 pp.  
SOURCE: CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3921460	A1	19910103	DE 1989-3921460	19890630
US 5079244	A	19920107	US 1990-534152	19900629
EP 406661	A1	19910109	EP 1990-112031	19900625
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
JP 03128367	A	19910531	JP 1990-168612	19900628
CA 2022016	A1	19901231	CA 1990-2020216	19900629
ZA 9005099	A	19910424	ZA 1990-5099	19900629
DD 297972	A5	19920130	DD 1990-342361	19900629
HU 58730	A2	19920330	HU 1990-4037	19900629
			DE 1989-3921460	19890630

PRIORITY APPLN. INFO.: CASREACT 114:122388; MARPAT 114:122388  
OTHER SOURCE(S): GRAPHIC IMAGE:

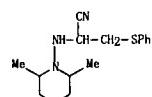


ABSTRACT:  
Aminosyndnonimines I [A = Cl-6 alkylene; X = O, S; R1 = H, acyl; R2 = C<6 alkyl, alkenyl, aralkyl, aryl; R3, R4 = alkyl, alkenyl, alkynyl, cycloalkyl, aralkyl, S-heterocyclic or their S-oxides; NR3R4 = heterocyclic] were prepared by nitrosation-cyclization of R3R4NNH(CN)AXR2. Thus, 1-amino-2,6-dimethylpiperidine was treated with EtCH2CHO and NaCN to give the nitrile II which was treated with NaNO2-HCl to give the syndnonime III. I have antihypertensive activity (no data).

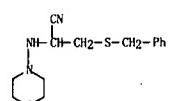
IT 132425-59-3P 132425-62-8P 132425-64-0P  
132425-71-9P 132425-73-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

L4 ANSWER 58 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

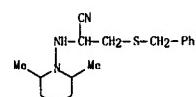
RN 132425-59-3 CAPLUS  
CN Propanenitrile, 2-[(2,6-dimethyl-1-piperidinyl)amino]-3-(phenylthio)- (CA INDEX NAME)



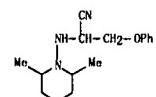
RN 132425-62-8 CAPLUS  
CN Propanenitrile, 2-(4-morpholinylamino)-3-[(phenylmethyl)thio]- (CA INDEX NAME)



RN 132425-64-0 CAPLUS  
CN Propanenitrile, 2-[(2,6-dimethyl-1-piperidinyl)amino]-3-[(phenylmethyl)thio]- (CA INDEX NAME)

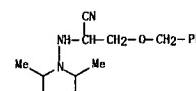


RN 132425-71-9 CAPLUS  
CN Propanenitrile, 2-[(2,6-dimethyl-1-piperidinyl)amino]-3-phenoxy- (CA INDEX NAME)



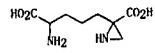
RN 132425-73-1 CAPLUS  
CN Propiounitrile, 2-[(2,6-dimethyl-1-piperidinyl)amino]-3-(phenylmethoxy)- (CA INDEX NAME)

L4 ANSWER 58 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



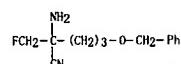
L4 ANSWER 59 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1990:459808 CAPLUS  
DOCUMENT NUMBER: 113:59808

TITLE: 2-(4-Amino-4-carboxybutyl)aziridine-2-carboxylic acid. A potent irreversible inhibitor of diaminopimelic acid epimerase. Spontaneous formation from  $\alpha$ -(halomethyl)diaminopimelic acids  
AUTHOR(S): Gerhart, Fritz; Higgins, William; Tardif, Chantal;  
Ducep, Jean Bernard  
CORPORATE SOURCE: Strasbourg Cent., Merrell Dow Res. Inst., Strasbourg, 67084, Fr.  
SOURCE: Journal of Medicinal Chemistry (1990), 33(8), 2157-62  
DOCUMENT TYPE: CODEN: JNCMAR; ISSN: 0022-2623  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 113:59808  
GRAPHIC IMAGE:



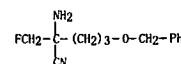
ABSTRACT:  
The title compound (I) was identified as the product of spontaneous hydrolysis of  $\alpha$ -(halomethyl)diaminopimelic acids  $RCH_2(NH_2)(CO_2H)CH_2CH_2CH_2CH(NH_2)CO_2H$  (II; R = F, Cl, Br). Under physiol. conditions, I is an extremely potent irreversible inhibitor of the bacterial enzyme diaminopimelic acid epimerase (EC 5.1.1.7). This unusual mode of action of an  $\alpha$ -halomethyl amino acid with a nonpyridoxal enzyme is investigated. Synthesis and characterization of I and II, kinetics of spontaneous formation of I from II, and kinetics of enzyme inhibition by both I and II are reported.

IT 82212-55-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and cyclocondensation of, with phthaloyl dichloride)  
RN 82212-55-3 CAPLUS  
CN Pentanenitrile, 2-amino-2-(fluoromethyl)-5-(phenylmethoxy)- (CA INDEX NAME)

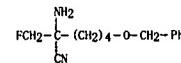


L4 ANSWER 60 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
CH2Ph, CH2C6H4OH-p; R3 = H, Cl-4 alkylcarbonyl; Y = CH2F, CH2Cl], useful as ornithine decarboxylase inhibitors, and their intermediate lactams (II; Y = CH2F, CH2Cl; n = 3, 4) were prep. Esterification of 2,6-diaminohexanoic acid-HCl in the presence of HCl and Schiff base formation of the resulting Me ester with PhCHO gave Me 2,6-bis(benzylideneamino)hexanoate. Deprotection of the latter compd. with NaH in (Me2N)3PO followed by alkylation with ClCH2F and hydrolysis with N aq. HCl gave Me 2-fluoromethyl-2,6-diaminohexanoate-2HCl which was treated with NaOMe/MeOH to give 2-amino-3-fluoromethyl-2-piperidone. Hydrolysis of the latter compd. in refluxing 6N aq. HCl gave 2-fluoromethyl-2,5-diaminopentanoic acid-HCl (III). III in vivo showed 70.5  $\pm$  12.5 % ornithine decarboxylase activity in ventral prostate of rats at 5 h after a single i.p. injection.

IT 82212-55-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and imidation of, with phthaloyl dichloride)  
RN 82212-55-3 CAPLUS  
CN Pentanenitrile, 2-amino-2-(fluoromethyl)-5-(phenylmethoxy)- (CA INDEX NAME)



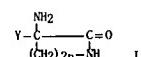
IT 82212-84-8P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and phthaloylation of)  
RN 82212-84-8 CAPLUS  
CN Hexanenitrile, 2-amino-2-(fluoromethyl)-6-(phenylmethoxy)- (CA INDEX NAME)



L4 ANSWER 60 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1989:76067 CAPLUS  
DOCUMENT NUMBER: 110:76067  
TITLE: Preparation of 2-chloromethyl or 2-fluoromethyl-2-amino acid derivatives as ornithine decarboxylase inhibitors  
INVENTOR(S): Bey, Philippe; Jung, Michel  
PATENT ASSIGNEE(S): Merrell Dow France et Cie, Fr.  
SOURCE: U.S., 17 pp. Cont.-in-part of U.S. Ser. No. 53,937, abandoned  
DOCUMENT TYPE: PCT  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 8  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4743691	A	19880510	US 1982-392052	19820625
US 4438270	A	19840320	US 1982-392051	19820625
US 4496588	A	19850129	US 1983-487243	19830428
US 4560795	A	19851224	US 1984-577116	19840206
US 4866206	A	19890912	US 1988-148906	19880127
US 5614557	A	19970325	US 1995-030531	19950314
		US 197-814765	AI 197101	
		US 979-53937	A2 19790702	
		US 979-53937	BI 19790410	
		US 979-28758	BI 19790410	
		US 980-204749	R2 19801107	
		US 981-262834	BI 19810512	
		US 982-382265	B3 19820526	
		US 982-392051	A3 19820625	
		US 982-392052	A3 19820625	
		US 982-373198	AI 19820929	
		US 984-639977	BI 19840810	
		US 987-110639	BI 19871015	
		US 988-228789	BI 19880804	
		US 989-334733	BI 19890406	
		US 989-431685	BI 19891103	
		US 990-534008	BI 19900601	
		US 991-759633	BI 19910912	
		US 991-759633	BI 19920224	
		US 993-2549	BI 19930111	
		US 993-137397	BI 19931014	
		US 994-284706	BI 19940802	

PRIORITY APPLN. INFO.: CASREACT 110:76067; MARPAT 110:76067  
GRAPHIC IMAGE:



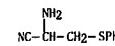
ABSTRACT:  
ZC(NHR3)(COR)Y [I; R = OH, Cl-8 alkoxy; Z =  $\gamma$ -guanidinopropyl, R1NH(CH2)n; R1 = H, Cl-4 alkylcarbonyl, R2CH(NH2)CO; n = 3, 4; R2 = Cl-4 alkyl]  
CASREACT 110:76067: MARPAT 110:76067

L4 ANSWER 61 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1988:21421 CAPLUS  
DOCUMENT NUMBER: 108:21421

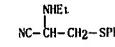
TITLE: Ketene equivalents. II. A formylcarbonium ion synthon. Synthesis of 3-thio-substituted 2-amino acids and thio-substituted enamines from 2-acyloxyacrylonitriles  
AUTHOR(S): Okamura, Norio; Naofumi; Harada, Toshiro  
CORPORATE SOURCE: Org. Chem. Works Inst. Technol., Kyoto, 606, Japan  
SOURCE: Bulletin of the Chemical Society of Japan (1987), 60(2), 609-12  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 108:21421

ABSTRACT:  
RSCH2CH(CN)02CR1 (I; R = Ph, Et; R1 = Ph, CMe3, Me) were prepared by Michael addition of the appropriate RSH to CH2:C(CN)02CR1. Amination of I (R = Ph; R1 = Me) (II) with NH3 followed by hydrolysis in aqueous HBr gave S-phenylcysteine in 63% overall yield. Amination of II with pyrrolidine or Et2NH followed by pyrolysis gave PhSCH:CHNR22 (R22 = (CH2)4, Et2).

IT 111248-44-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and acidic hydrolysis of)  
RN 111248-44-3 CAPLUS  
CN Propanenitrile, 2-amino-3-(phenylthio)- (CA INDEX NAME)



IT 111248-43-2P  
RL: SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
RN 111248-43-2 CAPLUS  
CN Propanenitrile, 2-(ethylamino)-3-(phenylthio)- (CA INDEX NAME)



## L4 ANSWER 62 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:575676 CAPLUS  
 DOCUMENT NUMBER: 107:175676  
 TITLE: New process for obtaining ( $\alpha$ -amino nitriles and their applications to organic synthesis  
 INVENTOR(S): Moinat, Gerard; Imbert, Thierry  
 PATENT ASSIGNEE(S): Rolland, Albert, S. A.; Fr.  
 SOURCE: PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8702980	A1	19870521	WO 1986-FR391	19861119
W: AU, DK, FI, HU, JP, KR, NO, SU, US RW: AT, BE, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE CN: TD, TG				
FR 2590252	A1	19870522	FR 1985-17214	19851119
FR 2590252	B3	19880909		
AU 8666248	A	19870602	AU 1986-66248	19861119
EP 245417	A1	19871119	EP 1986-906847	19861119
EP 245417	B1	19920304		
R: DE, FR, GB, IT				
US 4942221	A	19900717	US: 1987-86731	19870804
US 5103019	A	19920407	US: 1990-518086	19900502
PRIORITY APPLN. INFO.:			FR: 1985-17214	A 19851119
			WO: 1986-FR391	A 19861119
			US: 1987-86731	A3 19870804

OTHER SOURCE(S): MARPAT 107:175676

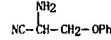
ABSTRACT:  
 RRIC(CN)(Ar2) (1; R = cycloalkyl, aliphatic, aromatic; Ar1 = H, alkyl, aryl) are prepared for use as intermediates for the preparation of amino acids. A PhMe solution of 0.665 g phenoxycetonitrile was reduced under an Ar atmosphere using Dibal at 0°. After stirring for 1 h at 0° the reaction mixture was treated with 1.3 equiv Et2AlCN and hydrolyzed to give 27% 2-amino-3-phenoxypropionitrile.

IT 110888-09-OP 110888-13-6P 110888-14-7P

RL: SPN (Synthetic preparation); PREP (Preparation); (preparation of)

RN 110888-09-O CAPLUS

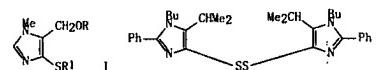
CN Propanenitrile, 2-amino-3-phenoxy- (CA INDEX NAME)



RN 110888-13-6 CAPLUS  
 CN Benzenepropanenitrile,  $\alpha$ -amino- $\omega$ -(phenoxy)- (CA INDEX NAME)

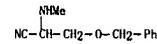
## L4 ANSWER 63 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:477706 CAPLUS  
 DOCUMENT NUMBER: 107:77706  
 TITLE: New synthesis of 4- and 5-imidazolethiols  
 AUTHOR(S): Spaltenstein, Andreas; Holler, Tod P.; Hopkins, Paul B.  
 CORPORATE SOURCE: Dep. Chem., Univ. Washington, Seattle, WA, 98195, USA  
 SOURCE: Journal of Organic Chemistry (1987), 52(14), 2977-9  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 107:77706  
 GRAPHIC IMAGE:

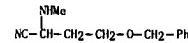


## ABSTRACT:

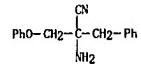
The preparation of 7 title compds. (e.g., I: R = tetrahydropyranyl, RI = PhCH2; R = PhCH2; RI = H; and II) is described. Thus, RICH2CHO (R = tetrahydropyranyl) was treated with MeNH2, HCl and NaCl in aqueous MeOH to give 65% H2NCCH(CN)CH2OR (II). R = tetrahydropyranyl, R2 = H; II: R2 = CHO). Treating II (R2 = CHO) with H2S and Et3N in EtOH gave 84% H2NCSSH(MeCH2)CH2OR as a mixture of 2 diastereomers. Cyclization of the latter compds. by treatment with CF3SO3SiMe3Et3N in CH2Cl2 and then NaBH4 followed by PhCH2Br gave 69% I (R = tetrahydropyranyl, RI = PhCH2).

IT 108560-41-4P 108560-42-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); (preparation and amidation of)RN 108560-41-4 CAPLUS  
 CN Propanenitrile, 2-(methylamino)-3-(phenylmethoxy)- (CA INDEX NAME)

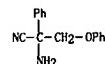
RN 108560-42-5 CAPLUS  
 CN Butanenitrile, 2-(methylamino)-4-(phenylmethoxy)- (CA INDEX NAME)



## L4 ANSWER 62 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 110888-14-7 CAPLUS  
 CN Benzenecetonitrile,  $\alpha$ -amino- $\omega$ -(phenoxyethyl)- (CA INDEX NAME)



## L4 ANSWER 64 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:160953 CAPLUS  
 DOCUMENT NUMBER: 104:160953  
 ORIGINAL REFERENCE NO.: 104:25289a, 25292a

TITLE: Synthesis and spectroscopic properties of Co(salen) derivatives containing pendant thioether groups and their dioxygen adducts

AUTHOR(S): Nakamoto, Kazuo; Oshio, Hiroki; Okawa, Hisashi; Kanda, Wakako; Horiuchi, Kaoru; Kida, Shigeo

CORPORATE SOURCE: Marquette Univ., Milwaukee, WI, 53233, USA

SOURCE: Inorganica Chimica Acta (1985), 108(4), 231-5

DOCUMENT TYPE: CODEN: ICHA3; ISSN: 0020-1693

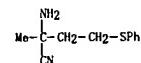
LANGUAGE: English

ABSTRACT:  
 Col. (H2L =  $\alpha$ -HOCGH4CH:NMe(CH2CH2SR)CH2N:CHC6H4OH-o (R = iso-Pr, Ph) were prepared. Electronic and ESR spectra in CH2Cl2 show that Col. (R = iso-Pr) is 5-coordinate with pendant thioether coordination at 519K whereas the Col. (R = Ph) is 4-coordinate at 198K and becomes a mixture of the 4- and 5-coordinate species at liquid N temperature. Upon reaction with O2 at low temps., both complexes form dioxygen adducts in which the pendant thioether groups are coordinated trans to dioxygen. Resonance Raman spectra show that Col. (R = iso-Pr) yields an equilibrium mixture of the 1:1 and 1:2(O2/Co) adducts at 190K while Col. (R = Ph) forms only the 1:1 adduct under similar conditions. These differences between Col. can be attributed to the variance in basicity of their pendant S atoms.

IT 101370-89-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); (preparation and reduction of)

RN 101370-89-2 CAPLUS

CN Butanenitrile, 2-amino-2-methyl-4-(phenylthio)- (CA INDEX NAME)

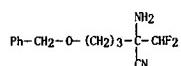


L4 ANSWER 65 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1984:22338 CAPLUS  
 DOCUMENT NUMBER: 100:22338  
 ORIGINAL REFERENCE NO.: 100:3501a, 3504a  
 TITLE: Fluorinated aminonitriles  
 INVENTOR(S): Gerhart, Fritz E.  
 PATENT ASSIGNEE(S): Merrell Toraude S. A., Fr.  
 SOURCE: U.S., 23 pp. Cont.-in part of U.S. Ser. No. 210,499, abandoned.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4405530	A	19830920	US 1981-321505	19811116
GB 2083031	A	19820317	GB 1981-25475	19810820
GB 2083031	B	19840418		
PRIORITY APPLN. INFO.:			US: 1980-210499	A2 19801126
			GB: 1981-25475	A 19810820
			GB: 1980-27503	A 19800823

ABSTRACT:  
 $\alpha$ -(Fluoromethyl)- $\omega$ -aminonitronitriles,  $RICH_2CH:CHC(NH_2)(CF_3-p)CN$  ( $p = 1, 2$ ;  $R_1 = H, MeO, PhCH_2, Ph_2CH, Ph_3C, CH_2:CH(C_2H_5)$ ,  $RICH_2C(CH_2)CH_2C(NH_2)(CF_3-p)CN$  ( $R_1 = H, Me, PhCH_2, Ph_2CH, Ph_3C, CH_2:CH(C_2H_5); n = 3, 4$ ;  $p = 1, 2$ ),  $RICH_2C(NH_2)(CF_3-p)CN$  ( $R_3$  = substituted Ph,  $p = 1, 2$ ),  $CH_2:CHC_2H_2C(NH_2)(CF_3-p)CN$ ) were prepared by treating a corresponding ketimine magnesium halide with HCN or with an alkali metal cyanide or ammonium cyanide and a proton source of sufficient acidity. Thus, fluoroacetonitrile in THF is added to propenyl/magnesium bromide, cooled to -40°, the reaction mixture is then poured into a solution of NaCN and NH\_4Cl in H\_2O and kept 1 h at room temperature to give crude 2-(fluoromethyl)-2-amino-3-pentanenitrile (1:1 cis/trans mixture).

IT 88185-21-IP  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 88185-21-1 CAPLUS  
 CN Pentanenitrile, 2-amino-2-(difluoromethyl)-5-(phenylmethoxy)- (CA INDEX NAME)



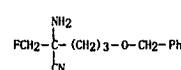
IT 82212-84-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, (fluoromethyl)phthalimidobenzylxoyhexanenitrile from)  
 RN 82212-84-8 CAPLUS  
 CN Hexanenitrile, 2-amino-2-(fluoromethyl)-6-(phenylmethoxy)- (CA INDEX NAME)

L4 ANSWER 66 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1982:438498 CAPLUS  
 DOCUMENT NUMBER: 97:38498  
 ORIGINAL REFERENCE NO.: 97:6571a, 6574a  
 TITLE: Aminonitrile derivatives  
 INVENTOR(S): Gerhart, Fritz  
 PATENT ASSIGNEE(S): Merrell Toraude S. A., Fr.  
 SOURCE: Eur. Pat. Appl., 77 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 46710	A1	19820303	EP 1981-401327	19810821
EP 46710	B1	19840613		
R: AT, BE, CH, DE, FR, IT, NL, SE				
DK 8103719	A	19820224	DK 1981-3719	19810821
NO 8102842	A	19820224	NO 1981-2842	19810821
NO 151460	B	19850102		
NO 151460	C	19850417		
AU 8174431	A	19820304	AU 1981-74431	19810821
AU 542144	B2	19850207		
JP 57077657	A	19820515	JP 1981-130352	19810821
JP 03030587	B	19910430		
ZA 8105807	A	19820825	ZA 1981-5807	19810821
ES 504882	A1	19810416	ES 1981-504882	19810821
CA 164479	A1	19840427	CA 1981-384339	19810821
CA 164479	T	19840615	AT 1981-401327	19810821
IL 63636	A	19850830	IL 1981-63636	19810821
PRIORITY APPLN. INFO.:			GB 1980-27503	A 19800823
			US 1980-210499	A 19801126
			EP 1981-401327	A 19810821

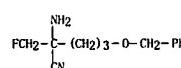
OTHER SOURCE(S): MARPAT 97:38498  
 ABSTRACT:  
 $H_2NC(R)CN$  ( $R$  = organic;  $R_1 = CH_2F, CH_2Cl$ ) were prepared as intermediates for  $H_2NC(R)CO_2H$  with antitumor, protozoocidal, antihistaminic, and anti-Parkinsonism activity (no data). Thus, Grignard reaction of  $BrCH_2:CHMe$  with  $FC_2H_2CN$  gave cis- and trans- $HC_2H_2C(NH_2)(CF_3-p)CN$  which were  $N$ -trifluoromethylated and brominated to give  $E-CH_2CONHC(CH_2F)(CN)CH_2CH_2Br$  (I). Amination of I with hexamethylenetetramine and hydrolysis gave  $E-H_2NC(H_2C_2H_2CH_2)CH_2CH_2C(NH_2)(CF_3-p)CO_2H$ .

IT 82212-55-3P  
 RL: RCT (Reagent); SPN (Synthetic preparation); PREP (Preparation); RACT (Reagent or reagent)  
 (preparation and reaction of, with phthaloyl chloride)  
 RN 82212-55-3 CAPLUS  
 CN Pentanenitrile, 2-amino-2-(fluoromethyl)-5-(phenylmethoxy)- (CA INDEX NAME)

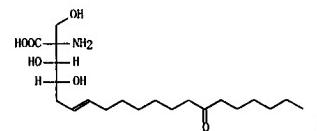


L4 ANSWER 65 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

NH<sub>2</sub>  
 $\text{FC}_2\text{H}-\text{C}(\text{CH}_2)_4-\text{O}-\text{CH}_2-\text{Ph}$   
 CN  
 IT 82212-55-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, phthalimido derivative from)  
 RN 82212-55-3 CAPLUS  
 CN Pentanenitrile, 2-amino-2-(fluoromethyl)-5-(phenylmethoxy)- (CA INDEX NAME)



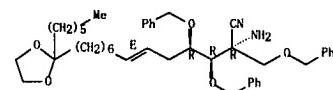
L4 ANSWER 67 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1981:425464 CAPLUS  
 DOCUMENT NUMBER: 95:25464  
 ORIGINAL REFERENCE NO.: 95:4455a, 4458a  
 TITLE: A total synthesis of the enantiomer of anhydromyriocin (anhydrothermoyiocidin)  
 AUTHOR(S): Payette, Daniel R.; Just, George  
 CORPORATE SOURCE: Dep. Chem., McGill Univ., Montreal, QC, H3A 2K6, Can.  
 SOURCE: Canadian Journal of Chemistry (1981), 59(2), 269-82  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GRAPHIC IMAGE:



ABSTRACT:  
 The optical antipode of anhydromyriocin, the  $\gamma$ -lactone derived from the antibiotic myriocin (thermoyiocidin), was synthesized from L-arabinose, establishing the absolute configuration of myriocin as I. In contrast to its natural enantiomer, it showed but little antifungal activity.

IT 78009-97-9 78086-20-IP  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 78009-97-9 CAPLUS  
 CN 6-Tridecenenitrile, 2-amino-13-(2-hexyl-1,3-dioxolan-2-yl)-3,4-bis(phenylmethoxy)-2-[ (phenylmethoxy)methyl]-, [2R-(2R\*,3R\*,4S\*,6E)]- (9CI) (CA INDEX NAME)

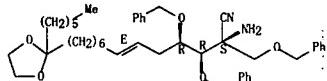
Absolute stereochemistry  
 Double bond geometry as shown.



RN 78086-20-1 CAPLUS  
 CN 6-Tridecenenitrile, 2-amino-13-(2-hexyl-1,3-dioxolan-2-yl)-3,4-bis(phenylmethoxy)-2-[ (phenylmethoxy)methyl]-, [2S-(2R\*,3S\*,4S\*,6E)]- (9CI) (CA INDEX NAME)

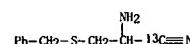
Absolute stereochemistry  
 Double bond geometry as shown.

L4 ANSWER 67 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



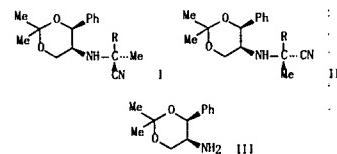
L4 ANSWER 68 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1981:175527 CAPLUS  
 DOCUMENT NUMBER: 94:175527  
 ORIGINAL REFERENCE NO.: 94:28703a, 28706a  
 TITLE: Synthesis of S-benzyl-DL-[1-13C]cysteine and its incorporation into oxytocin and [8-arginine]vasopressin and related compounds by total synthesis. Separation of diastereoisomers by partition chromatography and HPLC  
 AUTHOR(S): Hruby, Victor J.; Venkata, V.; Yang, Young C. S.  
 CORPORATE SOURCE: Dep. Chem., Univ. Arizona, Tucson, AZ, 85721 USA  
 SOURCE: Journal of Labelled Compounds and Radiopharmaceuticals (1980), 17(6), 801-12  
 CODEN: JLCRD4; ISSN: 0362-4803  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ABSTRACT: S-Benzyl-DL-cysteine-1-13C was prepared from NaI<sup>13</sup>CN in 3 steps and then converted to its tert-butoxycarbonyl derivative, which was used in the solid-phase synthesis of oxytocin and vasopressin analogs. The above analogs were separated and purified by partition chromatog. and their purity was checked by high pressure liquid chromatog.

IT 77284-34-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and hydrolysis of)  
 RN 77284-34-5 CAPLUS  
 CN Propanenitrile-[1-13C, 2-amino-3-[(phenyl)methyl]thio]- (9CI) (CA INDEX NAME)



L4 ANSWER 69 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

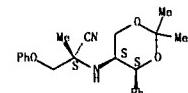
ACCESSION NUMBER: 1980:604032 CAPLUS  
 DOCUMENT NUMBER: 93:204032  
 ORIGINAL REFERENCE NO.: 93:32541n, 32544a  
 TITLE: Asymmetric syntheses. VII. Synthesis of optically active aminonitriles  
 AUTHOR(S): Weinges, Klaus; Blackholz, Heinz  
 CORPORATE SOURCE: Org.-Chem. Inst., Univ. Heidelberg, Heidelberg, D-6900/1, Fed. Rep. Ger.  
 SOURCE: Chemische Berichte (1980), 113(9), 3098-102  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 OTHER SOURCE(S): CASREACT 93:204032  
 GRAPHIC IMAGE:



**ABSTRACT:**  
 The asym. syntheses of aminonitriles I [R = cyclopropyl, cyclopentyl, cyclohexyl, CH<sub>2</sub>CH<sub>2</sub>R] (R1 = o-NO<sub>2</sub>, p-NO<sub>2</sub>, o-Cl, p-Cl, o-Me, p-Me), C(OH)Me<sub>2</sub>, C(OMe)Me<sub>2</sub>, C(OPh)Me<sub>2</sub>, CH<sub>2</sub>OH, CH<sub>2</sub>OMe) and II (R = CH<sub>2</sub>OPh) were achieved by treating (4S,5S)-aminodioxane III with RCMe and HCN. Absolute configurations of the new chiral centers and epimer equilibrium in solution were determined by NMR spectroscopy.

IT 75511-79-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (asym. synthesis of)  
 RN 75511-79-4 CAPLUS  
 CN Propanenitrile, 2-[2-(2-dimethyl-4-phenyl-1,3-dioxan-5-yi)amino]-2-methyl-3-phenoxy-, [4S-[4a,5a(R+)]- (9CI) (CA INDEX NAME)

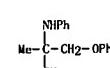
Absolute stereochemistry.



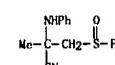
L4 ANSWER 70 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1980:585563 CAPLUS  
 DOCUMENT NUMBER: 93:185563  
 ORIGINAL REFERENCE NO.: 93:29555a, 29562a  
 TITLE: E/Z Equilibria. Part V. Azomethines, 1-azaallyl anions, and metastable secondary enamines  
 AUTHOR(S): Knorr, Rudolf; Weiss, Alfons; Loew, Peter; Raepple, Edith  
 CORPORATE SOURCE: Inst. Org. Chem., Univ. Muenchen, Munich, D-8000/2, Fed. Rep. Ger.  
 SOURCE: Chemische Berichte (1980), 113(7), 2462-89  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 ABSTRACT: Ketone anils RCH<sub>2</sub>CR<sub>1</sub>:NR<sub>2</sub> [I; R = Me, 1-cyclohexenyl, (un)substituted Ph, 1-naphthyl, PhO, PhS, PhSO<sub>2</sub>, etc.; R<sub>1</sub> = Me, Et; R<sub>2</sub> = Ph, 3,5-xylyl] were prepared and their configurations determined from <sup>1</sup>H NMR chemical shifts. The E-Z equilibrium constants for these compds. do not depend significantly on the inductive substituent effect. Metallation of I with LiN(CHMe<sub>2</sub>)<sub>2</sub> gave 1-azaallyl anions, the configurations of which depend on kinetic and thermodyn. control of the metallation reaction. Methanolysis of the anions gave metastable enamines RCH=CR<sub>1</sub>NR<sub>2</sub> via regio- and stereospecific N-protonation. Substituent parameters  $\Delta\delta$  were estimated from the E-Z equilibrium data.

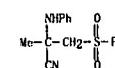
IT 75251-36-4P 75251-39-6P 75251-40-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and dehydrocyanation of)  
 RN 75251-36-4 CAPLUS  
 CN Propanenitrile, 2-methyl-3-phenoxy-2-(phenylamino)- (CA INDEX NAME)



IT 75251-38-6 CAPLUS  
 RN Propanenitrile, 2-methyl-2-(phenylamino)-3-(phenylsulfinyl)- (CA INDEX NAME)



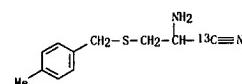
IT 75251-40-0 CAPLUS  
 RN Propanenitrile, 2-methyl-2-(phenylamino)-3-(phenylsulfonyl)- (CA INDEX NAME)



L4 ANSWER 70 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L4 ANSWER 71 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1980:426800 CAPLUS  
 DOCUMENT NUMBER: 93:26800  
 ORIGINAL REFERENCE NO.: 93:4517a,4520a  
 TITLE: Torsion angles in the cystine bridge of oxytocin in aqueous solution. Measurements of circumjacent vicinal couplings between proton, carbon-13, and nitrogen-15  
 AUTHOR(S): Fischman, Alan J.; Live, David H.; Wyssbrod, Herman R.; Agosta, William C.; Cowburn, David  
 CORPORATE SOURCE: Rockefeller Univ., New York, NY, 10021, USA  
 SOURCE: Journal of the American Chemical Society (1980), 102(8), 2533-9  
 DOCUMENT TYPE: CODEN: JACSAT; ISSN: 0002-7863  
 LANGUAGE: English  
 ABSTRACT: The six couplings from  $\text{H}\alpha$ ,  $^{13}\text{C}$ , and  $^{15}\text{N}$  to the 2  $\beta$  protons were measured for the 2 half-cystyl residues in oxytocin, using a series of specifically designed and synthesized isotopic isomers. In the case of half-cystyl I, the observed couplings suggest that the torsion angle  $\chi_1$  has the eclipsed value of  $-120^\circ$ . The value for this angle in the half-cystyl residue 6 is less clearly defined, but is probably also fixed. Using the same anal. as for  $\chi_1$ ,  $\chi_6$  is approx.  $+120^\circ$ . The stereochemical assignments of the  $\beta$  protons of the two residues were confirmed by stereoselective deuteration.

IT 73960-42-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and hydrolysis of)  
 RN 73960-42-6 CAPLUS  
 CN Propanenitrile-1- $^{13}\text{C}$ , 2-amino-3-[(4-methylphenyl)methyl]thio- (CA INDEX NAME)

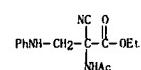


L4 ANSWER 72 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1977:579018 CAPLUS  
 DOCUMENT NUMBER: 87:179018  
 ORIGINAL REFERENCE NO.: 87:28255a, 28258a  
 TITLE: Amino acid derivatives as fungicides  
 INVENTOR(S): Ishida, Yasuo; Yakushiji, Kunito; Wakae, Osamu; Aoki, Isao; Masumoto, Keiichi  
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

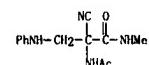
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52021327	A	19770217	JP 1975-97931	19750811
PRIORITY APPLN. INFO.:			JP 1975-97931	A 19750811

ABSTRACT: Amino acid derivs. are used as microbicides. Thus, N,N-dimethyl-2-acetamido-2-cyano-2-(propylthio)acetamide [P<sub>2</sub>SC(CN)(NMe<sub>2</sub>)CONMe<sub>2</sub>] [64205-24-9] sprayed on tomatoes at 250 ppm almost completely controlled Phytophthora infestans infection. This compound and 28 its analogs were prepared and their fungicidal activities presented.

IT 64205-38-5P 64205-39-6P  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and fungicidal activity of)  
 RN 64205-38-5 CAPLUS  
 CN Aminine, N-acetyl-2-cyano-3-(phenylamino)-, ethyl ester (CA INDEX NAME)

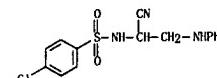


RN 64205-39-6 CAPLUS  
 CN Propanamide, 2-(acetylamino)-2-cyano-N-methyl-3-(phenylamino)- (CA INDEX NAME)



L4 ANSWER 73 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1974:120654 CAPLUS  
 DOCUMENT NUMBER: 80:120654  
 ORIGINAL REFERENCE NO.: 80:19415a, 19418a  
 TITLE: Reactions of 1-(p-chlorobenzenesulfonyl)-2-cyanoaziridine  
 AUTHOR(S): Markov, V. I.; Doroshenko, V. A.  
 CORPORATE SOURCE: Dnepropetr. Khim.-Tekhnol. Inst., Dnepropetrovsk, USSR  
 SOURCE: Ukrainski Khimicheskii Zhurnal (Russian Edition) (1974), 40(1), 59-62  
 DOCUMENT TYPE: CODEN: UZHAUD; ISSN: 0041-6045  
 LANGUAGE: Russian  
 GRAPHIC IMAGE: For diagram(s), see printed CA Issue.  
 ABSTRACT: The aziridinecarbonitrile (I) was obtained in 90% yield by base-catalyzed cyclization of p-C<sub>6</sub>H<sub>4</sub>(SO<sub>2</sub>NHCH<sub>2</sub>CH<sub>2</sub>CN) in dioxane. Treatment of I with HCl (g) in EtOAc at  $-5^\circ\text{C}$  yielded 25% p-C<sub>6</sub>H<sub>4</sub>(SO<sub>2</sub>NHCH<sub>2</sub>CH<sub>2</sub>CN)CONH<sub>2</sub>. I was halogenated by LiCl or LiBr in AcOH at room temperature to give 52% and 12% of p-C<sub>6</sub>H<sub>4</sub>(SO<sub>2</sub>NHCH<sub>2</sub>CH<sub>2</sub>CN)X (X = Cl, Br). p-C<sub>6</sub>H<sub>4</sub>(SO<sub>2</sub>NHCH<sub>2</sub>CH<sub>2</sub>CN)SCN was obtained in 79% yield by treatment of I with KSCN: 48% p-C<sub>6</sub>H<sub>4</sub>(SO<sub>2</sub>NHCH<sub>2</sub>CH<sub>2</sub>CN)SPh was obtained from I and PhSH. Addnl. obtained were p-C<sub>6</sub>H<sub>4</sub>(SO<sub>2</sub>NHCH<sub>2</sub>CH<sub>2</sub>CN)R (R = p-MeC<sub>6</sub>H<sub>4</sub>S, o-HOCC<sub>6</sub>H<sub>4</sub>S, phthalimido) and p-C<sub>6</sub>H<sub>4</sub>(SO<sub>2</sub>NHCH<sub>2</sub>CH<sub>2</sub>CN)CH<sub>2</sub>R (R = PhNH, morpholino).

IT 51918-63-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 51918-63-9 CAPLUS  
 CN Benzenesulfonamide, 4-chloro-N-[1-cyano-2-(phenylamino)ethyl]- (CA INDEX NAME)



## L4 ANSWER 74 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1974:47614 CAPLUS

DOCUMENT NUMBER: 80-47614

ORIGINAL REFERENCE NO.: 80:7757a, 7760a

TITLE: Synthesis of  $\alpha$ -amino- $\beta$ -(*p*-hydroxyphenoxy)propiophenone hydrochloride  
 AUTHOR(S): Pawonok, S.; Gaffield, W. P., Jr.  
 CORPORATE SOURCE: Dep. Chem., Univ. Iowa, Iowa City, IA, USA  
 SOURCE: Organic Preparations and Procedures International  
 (1973), 5(6), 265-9

CODEN: OPPIAK; ISSN: 0030-4948

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT:

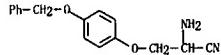
$p$ -ROCH<sub>2</sub>CH<sub>2</sub>CH(NH<sub>2</sub>)CONH<sub>2</sub>, HCl (I, R = H) was prepared from  $p$ -PhCH<sub>2</sub>OC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>CH<sub>2</sub>-CHR<sub>1</sub> (II; R = RI = OEt) (III) by either of reactions I + III was acid-hydrolyzed and the resulting aldehyde reported by the Stoecker reaction or by treatment with ammonium carbonate and KCl in EtOH at 50-60° for 2 hr to II (R = NH<sub>2</sub>, RI = CN). Hydrolysis of this nitrile with HCl in dioxane at room temperature gave I (R = PhCH<sub>2</sub>), hydrogenolysis of which gave I (R = H). III was prepared by reaction of  $p$ -PhCH<sub>2</sub>OC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>CH<sub>2</sub> with ClCH<sub>2</sub>CH<sub>2</sub>(OEt)<sub>2</sub>.

IT 51343-99-8P

RL: SPN (Synthetic preparation): PREP (Preparation)  
(preparation of)

RN 51343-99-8 CAPLUS

CN Propanenitrile, 2-amino-3-[4-(phenylmethoxy)phenoxy]- (CA INDEX NAME)



## L4 ANSWER 75 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1971:449523 CAPLUS

DOCUMENT NUMBER: 75:49523

ORIGINAL REFERENCE NO.: 75:7837a, 7840a

TITLE: Tetrazole analogs of amino acids and peptides. IV. Resolution of racemic tetrazole analogs of N-benzylxycarbonyl amino acids by means of hydrazide of L-tyrosine

AUTHOR(S): Grzonka, Z.; Liberek, B.  
 CORPORATE SOURCE: Inst. Chem. Univ. Gdańsk, Gdańsk, Pol.

SOURCE: Tetrahedron (1971), 27(9), 1783-7

CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 75:49523

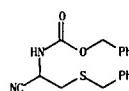
ABSTRACT: Racemic tetrazole analogs of N-benzylxycarbonyl derivs. of alanine, S-benzylcysteine, leucine, phenylalanine and valine were resolved by means of L-tyrosine hydrazide. The resolution of tetrazole analog of N-benzylxycarbonyl-DL-phenylalanine provided the L-enantiomer. From the other fractionation expts. tetrazole analogs of N-benzylxycarbonyl-D-alanine, -S-benzyl-D-cysteine, -D-leucine, and -D-valine were obtained.

IT 33045-19-IP

RL: SPN (Synthetic preparation): PREP (Preparation)  
(preparation of)

RN 33045-19-1 CAPLUS

CN Carbamic acid, [2-(benzylthio)-1-cyanoethyl]-, benzyl ester, DL- (8CI) (CA INDEX NAME)



## L4 ANSWER 76 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:435903 CAPLUS

DOCUMENT NUMBER: 59:35903

ORIGINAL REFERENCE NO.: 59:6511d-f

TITLE: Nitriles and amidines of optically active acylamino acids and peptides

AUTHOR(S): Woolley, D. V.; Hershey, J. W. B.; Jodłowski, M. A.  
 CORPORATE SOURCE: Kochieller Inst., New York, NY

SOURCE: Journal of Organic Chemistry (1963), 28(8), 2012-15

CODEN: JOCEAM; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 59:35903

ABSTRACT:

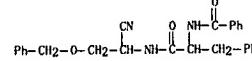
Nitriles of acylated amino acids and peptides were made by treatment of the corresponding amides with pyridine and phosphorus oxychloride. The optical activity was retained. The amidines were made by conversion of the nitriles to imino ethers, which then were converted to amidines. In this way acetyl-L-phenylalanine nitrile,  $\alpha$ -acetyl- $\omega$ -tosyllysine nitrile, N-benzoyl-L-phenylalanyl-O-benzylserine nitrile, N-acetyl-L-phenylalanine amidine, the corresponding N-benzylamide,  $\alpha$ -acetyl- $\omega$ -tosyllysine amidine, and the corresponding N-benzylamide were prepared. The conversion of the dipeptide nitriles to their amidines was largely unsuccessful because of an intramolecular decomposition, which gave N-benzylserine amidine from N-benzylphenylalanylserine nitrile.

IT 97255-68-0P, Hydrocinnamamide,  $\alpha$ -benzamido-N-[2-(benzyloxy)-1-cyanoethyl]-

RL: PREP (Preparation)

(preparation of)

RN 97255-68-0 CAPLUS

CN Hydrocinnamamide,  $\alpha$ -benzamido-N-[2-(benzyloxy)-1-cyanoethyl]- (7CI) (CA INDEX NAME)

## L4 ANSWER 77 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:435903 CAPLUS

DOCUMENT NUMBER: 59:35903

ORIGINAL REFERENCE NO.: 59:6511d-f

TITLE: Preparation of optically active N-protected amino nitriles from N-protected amino acids

AUTHOR(S): Liberek, Bogdan; Nowicka, Aldona; Szrek, Jerzy  
 CORPORATE SOURCE: Wyższa Szkoła Pedagogiczna, Gdańsk, Pol.

SOURCE: Roczniki Chemii (1965), 39(3), 369-74

CODEN: ROCHAC; ISSN: 0035-7677

DOCUMENT TYPE: Journal

LANGUAGE: English

GRAPHIC IMAGE: For diagram(s), see printed CA issue.

ABSTRACT:

cf. CA 60, 10781d. The title compds. were prepared by dehydration of the amides of N-protected amino acids with POC<sub>13</sub> in pyridine. The amino group was blocked either with the benzylxycarbonyl group (Z) or with the phthaloyl group (Ph). Thus, a solution of 1.38 g. L-PhCH<sub>2</sub>SC<sub>6</sub>H<sub>4</sub>CH(NH<sub>2</sub>)CONH<sub>2</sub> in 5.5 ml. dry pyridine was treated dropwise at -5° with POC<sub>13</sub> in 1 ml. CH<sub>2</sub>C<sub>12</sub> and kept 30 min. in a cooling bath to give 1.2 g. L-PhCH<sub>2</sub>SC<sub>6</sub>H<sub>4</sub>CH(NH<sub>2</sub>)CN, m. 68-70° (Me<sub>2</sub>CO-petr. ether or CS<sub>2</sub>-petr. ether), [α]<sub>D</sub>205800 -30.4°, 2.4. Me<sub>2</sub>CO).

Similarly prepared were the following (compound, m.p., [α]<sub>D</sub>205800, and % yield given): ZNHC<sub>2</sub>2CN, 61-2°, -88; L-Me<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH(NH<sub>2</sub>)CN, -93;

L-NHC<sub>2</sub>2CH(NH<sub>2</sub>)CN (I), 111-12°, -89; L-II, 131-2°, -78.8°(c.f. 4.0. Me<sub>2</sub>CO, 87; DL-Me<sub>2</sub>CH(NH<sub>2</sub>)CN, 139-40°, -101 (c.f. 4.0. Me<sub>2</sub>CO, 87; PhCH<sub>2</sub>CH<sub>2</sub>CH(NH<sub>2</sub>)CN, 153-4°, -73; L-Me<sub>2</sub>CH<sub>2</sub>CH(NH<sub>2</sub>)CN, 67-9°, -89; PhNHC<sub>2</sub>2CO<sub>2</sub>CH<sub>2</sub>2CN, 130-2°, -86; DL-NHC<sub>2</sub>2CH(NH<sub>2</sub>)CO<sub>2</sub>CH<sub>2</sub>2CN, 116-17°, -84).

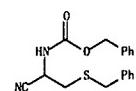
It was also prepared in 82% yield from H<sub>2</sub>NOC<sub>2</sub>CH<sub>2</sub>CH(NH<sub>2</sub>)CONH<sub>2</sub> as described above, using warm dimethylformamide as a cosolvent and by repeating the dehydration with POC<sub>13</sub> twice. A warm solution of 817 mg. PhNHC<sub>2</sub>2CH<sub>2</sub>2CN in 6 ml. pyridine was treated at 60° with 1 ml. POC<sub>13</sub>, refluxed 0.5 min., cooled, and diluted with icewater to precipitate 477 mg. PhNHC<sub>2</sub>2CN, 127-9° (alc.). A solution of 5 g. Me<sub>2</sub>CH<sub>2</sub>CH(NH<sub>2</sub>)COOH and 3 ml. NEt<sub>3</sub> in 30 ml. dioxane was treated at -5° with 2 ml. ClCO<sub>2</sub>Et, kept in a cooling bath for 15 min., then NH<sub>3</sub> in CHCl<sub>3</sub> added, the whole left for 45 min. at 0°, diluted with water and acidified to pH 5. Evaporation of the organic solvent in vacuo gave 3.59 g. Me<sub>2</sub>CH<sub>2</sub>CH(NH<sub>2</sub>)CO<sub>2</sub>CH<sub>2</sub>2CN, m. 178-9° (PrOH).

IT 33045-19-IP, Carbamic acid, [2-(benzylthio)-1-cyanoethyl]-, benzyl ester  
 RL: PREP (Preparation)

(preparation of)

RN 33045-19-1 CAPLUS

Carbamic acid, [2-(benzylthio)-1-cyanoethyl]-, benzyl ester, DL- (8CI) (CA INDEX NAME)



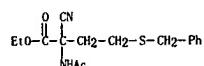
## L4 ANSWER 78 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1954:11227 CAPLUS  
 DOCUMENT NUMBER: 48:11227  
 ORIGINAL REFERENCE NO.: 48:20904-c  
 TITLE: S-Benzylhomocysteine  
 INVENTOR(S): Tatsukawa, Sueo; Nakamori, Ritsuo  
 PATENT ASSIGNEE(S): Takeda Pharmaceutical Industries Co.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 27002778	B4	19520725	JP	

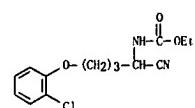
ABSTRACT: E10N<sub>2</sub> (1.2 g. Na and 25 ml. alc.) and 8.5 g. AcNH(CN)CO<sub>2</sub>Et treated dropwise with 10.2 g. PhCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>C<sub>2</sub>H<sub>5</sub>, heated 15 hrs. on a water bath, the product poured into ice water, and the precipitate filtered and washed with water give 9.6 g. PhCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>(NHAc)(CN)CO<sub>2</sub>Et (1), m. 110-12° (from alc.); I and 200 ml. 15% HCl boiled on an oil bath 10 hrs., the product filtered with C, the filtrate concentrated in vacuo, the residue neutralized with CSH<sub>5</sub>N, and the precipitate filtered, and washed with water and alc. give 41.2 g. PhCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>(NH<sub>2</sub>)CO<sub>2</sub>H, m. 243° (decomposition) (from water).

IT 854429-41-7P. Butyric acid, 2-acetamido-4-(benzylthio)-2-cyano-, ethyl ester.  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 854429-41-7 CAPLUS  
 CN Butyric acid, 2-acetamido-4-(benzylthio)-2-cyano-, ethyl ester (5CI) (CA INDEX NAME)



L4 ANSWER 79 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 RCH(CN)CONH<sub>2</sub>. Carbamates RCH(R'NHC<sub>2</sub>O). Phenylureido deriv. of amino acid  
 RCH(NH<sub>2</sub>)CO<sub>2</sub>H: R, R', M.p. (°C):  
 o-C<sub>6</sub>H<sub>5</sub>CO<sub>2</sub>H(CH<sub>2</sub>)<sub>3</sub>, 99-100, CN CO<sub>2</sub>H, Et, Et PHCH<sub>2</sub>, 67-8 101-2 84-5,  
 178-80; o-IC<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>3</sub>, 113-14, CN, PhCH<sub>2</sub>, 90-2, 184-6; o-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>3</sub>, 112-13, CN, CO<sub>2</sub>H, Et, Et, 66 123-4, 163-5; m-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>3</sub>, 120, CN, Et, 108, 174-6b; p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>3</sub>, 127-8, CN, CN, Et PHCH<sub>2</sub>, 62-3 75-6, 190-2;  
 o-C<sub>1</sub>C<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>2</sub>, 88-9, CN, C<sub>2</sub>H<sub>5</sub>E<sub>t</sub>, 69, 167-9; o-BrC<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>2</sub>, 95-6, CN, Et, 75, 147-8a; o-IC<sub>5</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>2</sub>, 97-8, CN, CN, Et PHCH<sub>2</sub>, 74 91-2, 157-8a; m-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>2</sub>, 101-2, CN, PhCH<sub>2</sub>, 83-4; a-p-tolylsulfonamido deriv.; b Hydantoin deriv. m. 157-8°.

IT 408537-19-9P. Carbamic acid, [4-(o-chlorophenoxy)-l-cyanobutyl]-, ethyl ester 854392-03-4P. Carbamic acid, [3-(o-bromophenoxy)-l-cyanopropyl]-, ethyl ester 854385-55-5P. Carbamic acid, [3-(o-chlorophenoxy)-l-cyanopropyl]-, ethyl ester 855687-96-6P. Carbamic acid, [l-cyano-4-(o-iodophenoxy)butyl]-, benzyl ester 855688-66-3P. Carbamic acid, [l-cyano-3-(o-nitrophenoxy)propyl]-, benzyl ester 876511-36-3P. Carbamic acid, [l-cyano-4-[o-nitrophenoxy]butyl]-, ethyl ester 876511-37-4P. Carbamic acid, [l-cyano-4-[m-nitrophenoxy]butyl]-, ethyl ester  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 408537-19-9 CAPLUS  
 CN Carbamic acid, [4-(2-chlorophenoxy)-l-cyanobutyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 854882-03-4 CAPLUS  
 CN Carbamic acid, [3-(o-bromophenoxy)-l-cyanopropyl]-, ethyl ester (5CI) (CA INDEX NAME)

O  
 NH—C—OEt  
 ||  
 O—CH<sub>2</sub>—CH<sub>2</sub>—CH—CN  
 Br

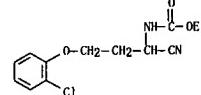
RN 854885-55-5 CAPLUS  
 CN Carbamic acid, [3-(o-chlorophenoxy)-l-cyanopropyl]-, ethyl ester (5CI) (CA INDEX NAME)

## L4 ANSWER 79 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

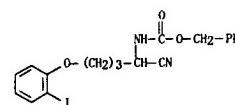
ACCESSION NUMBER: 1954:782 CAPLUS  
 DOCUMENT NUMBER: 48:782  
 ORIGINAL REFERENCE NO.: 48:1231, 124a-i  
 TITLE: Synthesis of α-amino acids from ethyl cyanoacetate  
 AUTHOR(S): Gagnon, Paul E.; Nadeau, Guy; Cote, Raymond  
 CORPORATE SOURCE: Laval Univ., QC  
 SOURCE: Canadian Journal of Chemistry (1952), 30, 592-7  
 CODEN: CJCHAG; ISSN: 0008-4042  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 48:782  
 GRAPHIC IMAGE: For diagram(s), see printed CA Issue.  
 ABSTRACT:

Mono-substituted cyanoacetic esters obtained by condensation of substituted bromophenoxyethanes and propanes with CH<sub>2</sub>(CN)CO<sub>2</sub>Et (I) in presence of K<sub>2</sub>CO<sub>3</sub> were transformed through a Curtius degradation into cyanoacetoisocyanates which were hydrolyzed in either acid or alkaline medium to α-amino acids. Hydrolysis of the corresponding N-carbobenzyloxy- or N-carboethoxymononitriles afforded better yields. Mixts. containing 1 mole 1,3-C<sub>6</sub>H<sub>5</sub>Bz<sub>2</sub>, 0.5 mole substituted phenol, 0.5 mole NaOH, and 400 ml. H<sub>2</sub>O were heated under reflux with stirring until neutral, 0.15-0.20 moles NaOH added and refluxing continued until neutral, dried and fractionally distilled to give the 3-phenoxy-1-propyl bromide. 2-Phenoxyethyl bromides were prepared similarly from (CH<sub>2</sub>Br)<sub>2</sub>. Anhydrous K<sub>2</sub>CO<sub>3</sub> (0.12 mole), Comp. (B, p. °C/m.p. °C), Yield %, *n*<sub>D</sub><sup>25</sup>: o-C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>3</sub>Br, 119-20/5, 69-70, 55%; o-C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>3</sub>Br, 150-2/3, 21-80, 61%; o-2NC<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>3</sub>Br, 138-40/1, 37-8, 58-9, m-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>3</sub>Br, 143-8/8, 72-4, -; o-C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>Br, 138-10/1-2, 10-11, 64-6, 1.56%; o-BrC<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>Br, 110-11/2, 11-11, 59-60, 1.56%; o-2NC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>Br, 140-40/2, 39-2, 70-2, -; was added to a solution of the bromide (0.10 mole) in 0.5 mole l, the mixture boiled 2.5-3 hrs. at 15-20 mm. pressure at 115-20°, agitation being obtained by a fine stream of dry air (when the 2-phenoxyethyl bromide was used 10 g. CaSO<sub>4</sub> was added to the reaction mixts.) after cooling the mixts. were poured into 150 ml. water, extracted with Et<sub>2</sub>O, the exts. dried over Na<sub>2</sub>SO<sub>4</sub> and distilled in vacuo to yield the monosubstituted ester, RCH(CN)CO<sub>2</sub>Et (see following table). The cyano- R, B, p. °C/m.p. °C, Yield %:  
 o-C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>3</sub>, 128-33/0.05, 49-50, 89-91; o-C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>3</sub>, 140-5/0.05, 57-8, 87-91; o-C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>3</sub>, 153-3/0.05, 38-9, 89-92; o-2NC<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>3</sub>, 175-3/0.05, 50-51, 87-90; m-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>3</sub>, 160-5/0.05, 64, 88-89; p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>3</sub>, 185-90/0.05, 50-51, 88-90; o-C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>, 130-5/0.05, 28-9, 77-80; o-C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>, 135-40/0.05, 36-7, 77-80, m-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)<sub>2</sub>, 190-5/1-2, 64, 61-5; o-BrC<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>, 140-40/0.05, 34-5, 72-4, -; o-2NC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>, 135-40/0.05, 34-5, 72-4, -; o-C<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>, 110-11/2, 10-11, 59-60, 1.56%; o-BrC<sub>6</sub>H<sub>5</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>, 125-30/1-2, 48-9, 75-7, -; m-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>O(CH<sub>2</sub>)<sub>2</sub>, 140-40/1-2, 39-2, 70-2, -; was added to a solution of the bromide (0.10 mole) in 0.5 mole l, the mixture placed in an evacuated desiccator, the solid products formed were triturated with Et<sub>2</sub>O and water to yield, after recrystn. from H<sub>2</sub>O-EtOH, 80-90% of the hydrazides RCH(CN)CONHNH<sub>2</sub>. These were dissolved in 2N HCl, diazotized in the usual way, the azides extracted with Et<sub>2</sub>O on C<sub>13</sub>, the exts. washed with water and dried over Na<sub>2</sub>SO<sub>4</sub>. The cyanacetilisocyanates were obtained by heating the azides in the presence of PhMe or immediately transformed into the carbamates in the presence of PhCH<sub>2</sub>OH or EtOH. When purified by washing with 5% NaOH and water the carbamates could be recrystd. from Et<sub>2</sub>O-petr. ether (65-100°). Hydrolysis of the nitrile group in hot alc. solution with dry HCl followed by mild alkaline treatment gave the carboethoxy amino acids. Hydrolysis of the carbamates or cyanacetisocyanates with HCl at the b.p. or under pressure give 60-75% of the corresponding amino acid. The cyanacetohydrazides and carbamates which were prepared are listed in the following table. Cyanacetohydrazides

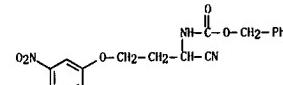
## L4 ANSWER 79 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



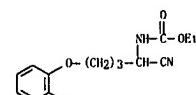
RN 855687-96-6 CAPLUS  
 CN Carbamic acid, [l-cyano-4-(o-iodophenoxy)butyl]-, benzyl ester (5CI) (CA INDEX NAME)



RN 855688-66-3 CAPLUS  
 CN Carbamic acid, [l-cyano-3-(m-nitrophenoxy)propyl]-, benzyl ester (5CI) (CA INDEX NAME)

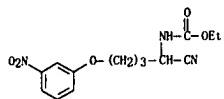


RN 876511-36-3 CAPLUS  
 CN Carbamic acid, [l-cyano-4-(o-nitrophenoxy)butyl]-, ethyl ester (5CI) (CA INDEX NAME)



RN 876511-37-4 CAPLUS  
 CN Carbamic acid, [l-cyano-4-(m-nitrophenoxy)butyl]-, ethyl ester (5CI) (CA INDEX NAME)

L4 ANSWER 79 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 80 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1953:31762 CAPLUS

DOCUMENT NUMBER: 47:31762

ORIGINAL REFERENCE NO.: 47:5353-g

TITLE: A simple synthesis of DL-cystine from acrylonitrile

AUTHOR(S): Gundermann, Karl Dietrich; Micheal, Fritz

CORPORATE SOURCE: Univ. Münster, Germany

SOURCE: Ann. (1952), 578, 45-8

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 47:31762

## ABSTRACT:

To 35 g. freshly distilled PhCH<sub>2</sub>SH was added 0.6 g. dry NaOMe (free from MeOH) cooled to 0°, and, with stirring, 32 g. CH<sub>2</sub>:CClCN (C.A., 43, 2574d) and, such a rate that the temperature never rose above 40°, the mixture cooled to 0°, then heated 1 hr. on the steam bath, neutralized with NaOH in MeOH, filtered and fractionated in vacuo, giving 39.3 g. PhCH<sub>2</sub>CH<sub>2</sub>CHClCN (I), b.p. 121-2°, m. 43-45°, and a by-product (not analyzed) but possibly PhCH<sub>2</sub>SCi(CH<sub>2</sub>CHClCN), b.p. 101-5°, m. 96-8°, l (10.15 g.) with liquid NH<sub>3</sub> gave 5.4 g. crude PhCH<sub>2</sub>CH<sub>2</sub>(NH<sub>2</sub>)CN, which, without purification, was hydrolyzed with 50 cc. concentrated HCl, yielding 4.23 g. DL-PhCH<sub>2</sub>CH<sub>2</sub>CH(NH<sub>2</sub>)CO<sub>2</sub>H (II), m. 209-13° (decomposition), purified by solution in 10% NaOH, precipitation with 25% AcOH, and crystallization from H<sub>2</sub>O, l (6.5 g.) mixed with 5.66 g. powdered o-C<sub>6</sub>H<sub>4</sub>(CO)<sub>2</sub>-NK was stirred and heated 8 hrs. at 123-130°; the product triturated with H<sub>2</sub>O, extracted with C<sub>6</sub>H<sub>6</sub>, and fractionated in vacuo gave 2.5 g. C<sub>6</sub>H<sub>4</sub>(CO)<sub>2</sub>NHCN (III), m. 97-8°, b.p. 01 228°, l, 1.46 g. of which, saponified by the Wood-du Vigneau method (C.A. 34, 82.2) gave 0.39 g. II and 0.29 g. III. II in liquid NH<sub>3</sub> with Na, followed by oxidation (cf. W. and du V.), gave DL-cystine.

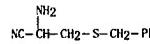
IT 408352-79-4P. Propionitrile, 2-amino-3-(benzylthio)-

RL: PREP (Preparation)

(preparation of)

RN 408352-79-4 CAPLUS

CN Propanenitrile, 2-amino-3-[(phenylmethyl)thio]- (CA INDEX NAME)



L4 ANSWER 81 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1950:12654 CAPLUS

DOCUMENT NUMBER: 44:12654

ORIGINAL REFERENCE NO.: 44:2476c-f

TITLE: Synthesis of S-benzyl-DL-Cysteine

AUTHOR(S): Gavron, Oscar; Glaid, Andrew J.; III.

CORPORATE SOURCE: Duquesne Univ., Pittsburgh, PA

SOURCE: Journal of the American Chemical Society (1949), 71,

3232-3

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

## ABSTRACT:

EtOH (500 ml.), treated with 23 g. Na and then with 124 g. PhCH<sub>2</sub>SH and, after cooling with 169 g. BrCH<sub>2</sub>CH<sub>2</sub>Me<sup>1/2</sup> and refluxed 3 hrs., gives 70% (benzylmercapto)acetaldehyde di-Me acetal (I), b.p. 66 140-1°, d<sub>42</sub> 1.075, n<sub>D20</sub> 1.5300; add 350 ml. N H<sub>2</sub>SO<sub>4</sub>, refluxed 1.5 hrs., give 75% PhCH<sub>2</sub>SCi(HO) (II), b.p. 125.5-7°, d<sub>42</sub> 1.1105, n<sub>D20</sub> 1.5699 (semicarbazone, m. 105-7°), II (35 g.), added slowly to 23 g. NaHSO<sub>3</sub> in 75 ml. H<sub>2</sub>O, shaken 10 min., treated portionwise with 11 g. NaCN in 30 ml. H<sub>2</sub>O, shaken 30 min., and extracted with C<sub>6</sub>H<sub>6</sub>, gives 85% crude PhCH<sub>2</sub>CH<sub>2</sub>CH(OH)CN which, treated at 100° with NH<sub>3</sub>, gives 65% PhCH<sub>2</sub>CH<sub>2</sub>CH(NH<sub>2</sub>)CN (III); heated 4 hrs. at 100° with 100 ml. concentrated HCl, 23 g. III yields 67.5% S-benzyl-DL-cysteine (IV), m. 213-14° II (20 g.), 57 g. (NH<sub>4</sub>)<sub>2</sub>CO<sub>3</sub>, 12.7 g. NaCN, and 340 ml. 50% EtOH, heated 4 hrs. at 40-5° give 70% S-(benzylmercapto)methylhydantoin, m. 118-19°; hydrolysis resulted in decomposition without yielding IV.

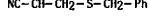
IT 408352-79-4P. Propionitrile, 2-amino-3-(benzylthio)-

RL: PREP (Preparation)

(preparation of)

RN 408352-79-4 CAPLUS

CN Propanenitrile, 2-amino-3-[(phenylmethyl)thio]- (CA INDEX NAME)

NH<sub>2</sub>

L4 ANSWER 82 OF 82 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1948:13659 CAPLUS

DOCUMENT NUMBER: 42:13659

ORIGINAL REFERENCE NO.: 42:2931a-1, 2932a-b

TITLE: Synthesis of some amino acids, including methionine

AUTHOR(S): Catch, J. R.; Cook, A. H.; Graham, A. R.; Heilbron, Ian

CORPORATE SOURCE: Imp. Coll. Sci. Technol., London, UK

SOURCE: Journal of the Chemical Society (1947) 1609-13

CODEN: JCSA9; ISSN: 0368-1769

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 42:13659

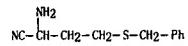
GRAPHIC IMAGE: For diagram(s), see printed CA Issue.

## ABSTRACT:

cf. C.A. 41, 47741. CH<sub>2</sub>:CHCHO (I) (5.6 g.) and 7.6 g. AcSH, mixed at 0° and kept overnight, give 68%  $\beta$ -(benzylmercapto)propionaldehyde, b.p. 92-93°, n<sub>D18</sub> 1.118 (2,4-dinitrophenylhydrazone, yellow, m. 127.5°); 21 g. MeCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>H (II) and 22.5 g. AcSH give 65%  $\beta$ -(benzylmercapto)butyraldehyde, b.p. 91-2°, n<sub>D14</sub> 1.4882 (2,4-dinitrophenylhydrazone, yellow, m. 96°); 8 g. Me<sub>2</sub>CH:CH<sub>2</sub>CO<sub>2</sub>H (III) and 8 g. AcSH give 33%  $\beta$ -(benzylmercapto)- $\beta$ -methylbutyraldehyde, b.p. 110°, n<sub>D20</sub> 1.4922 (2,4-dinitrophenylhydrazone, yellow, m. 94°). I (20 g.) containing 2 drops Et<sub>3</sub>N at 0°, treated with MeSH, gives 86% MeSCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>H (IV), b.p. 6750 166° (2,4-dinitrophenylhydrazone, yellowish orange, m. 122-3°); EtSH gives 62% EtSCH<sub>2</sub>CO<sub>2</sub>H (V), b.p. 6750 165° (2,4-dinitrophenylhydrazone, orange, m. 100°). I (5.6 g.) at 0°, 10% NaOH, 12.5% Et<sub>3</sub>N and drop of piperidine added and the mixture kept 15 min. at 0° and 1 h. at room temperature, gives 83%  $\beta$ -(benzylmercapto)propionaldehyde (VI), b.p. 158°, n<sub>D15</sub> 1.5484 (2,4-dinitrophenylhydrazone, m. 113°). VI (1.12 g.) and 1 cc. HCN at 0°, treated with a drop of piperidine, ether-HCl added after 0.5 h., the HCN removed in vacuo. 3 cc. EtOH-NH<sub>3</sub> added, and the solution (sealed tube) kept overnight at room temperature and heated 0.5 h. at 100°, give 55%  $\beta$ -(benzylmercapto)butyraldehyde (VII), b.p. 156-7°, n<sub>D20</sub> 1.5523 (2,4-dinitrophenylhydrazone, yellow, m. 69°); VII yields 27% of the  $\gamma$ -Me derivative, m. 156-7°. VII (15 g.), 15 g. AcOK, 5.5 g. NH<sub>2</sub>OH.HCl, and 100 cc. EtOH, refluxed 30 min., and 5 g. of oily oxime (5 g.) in 150 cc. moist ether, refluxed overnight with 4 g. Al-Hg, give 2 g. 3-(benzylmercapto)butyramine, b.p. 1.90-2°, n<sub>D20</sub> 1.5545 (HCl salt, m. 123°); VII similarly yields 25% 3-(benzylmercapto)-3-methylbutyramine, b.p. 1.102-4°, n<sub>D20</sub> 1.5521 (HCl salt, m. 157°). IV (6.3 g.) treated with 5 cc. anhydrous HCN and 100 mg. KCN and the reaction product heated 2 h. at 80° with 40 cc. 10% EtOH-NH<sub>3</sub> give 65%  $\alpha$ -amino- $\gamma$ -(methylmercapto)-butyronitrile (IX), analyzed as the oxalate, with 0.5 mol. EtOH, m. 200° (decomposition). V (10 g.) gives 3.5 g.  $\alpha$ -amino- $\gamma$ -(ethylmercapto)butyronitrile oxalate (X), m. 230° (decomposition). IX, refluxed 1.5 h. with 10 cc. concentrated HCl, gives 52% methionine (XI); X gives 46%. XI, refluxed 2 h. with 50% EtOH-CS<sub>2</sub>, gives 75% 5-(2-ethylmercapto)-4-(2-methylidihydro-5H-thiophen-2-yl)-1,3-dihydro-2H-thiophene (XII), yellow, m. 212° (decomposition); if the reaction is carried out in the presence of DMS, there results 5-benzylidihydro-2-mercapto-4-(2-ethylmercaptoethyl)thiophene (XIII), yellow, m. 196-7° (decomposition). XII or XIII, refluxed with a mixture of AcOH and concentrated HCl, gives 25% XI. The overall yield of XI from I is 29%. VIIA (860 mg.) and 17.5 cc. 47% HBr, heated 3.5 h. at 100°, give 60% S-benzylhomocysteine, m. 190-1°. VIIIB (257 mg.)

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 and 3 cc. concd. HCl, heated 16 h. at 100°, give 110 mg.  
 $\alpha$ -amino- $\gamma$ (benzylmercapto)-valeric acid, m.p. 215-16°  
 (decompn.). The free base from 3.8 g. VIIIB, refluxed 3 h. with 20 cc. 50%  
 EtOH-CS2, gives 70% 5 - amino - 2 - mercapto - 4 - [2 -  
 (benzylmercapto)isobutyl]thiazole (XIV), pale yellow, m.p. 237°; with 50%  
 aq. (CHO)2 it yields the bisazomethine (XV), red, m.p. 238°. XIV (6 g.)  
 refluxed 2 h. with 40 cc. 50% AcOH-concd. HCl, gives 59%  $\alpha$ -amino- $\gamma$ -  
 (benzylmercapto)- $\gamma$ -methylvaleric acid (XVI), m.p. 178°. With Na in  
 liq. NH3 XVI yields 73%  $\alpha$ -amino- $\gamma$ -mercaptop- $\gamma$ -methylvaleric  
 acid (XVII). Me2C(SH)CH2CH(NH2)CO2H, m.p. 219° (decompn.). XVII (250 mg.  
 of the HCl salt), 1 cc. BzH, and 2 cc. MeOH-HCl, heated 15 min. on the steam  
 bath, give 4-carbamethoxy-2-phenyl-6,6-dimethyl- $\alpha$ -thiazane, m.p. 105°.

IT 855621-15-7P, Butyronitrile, 2-amino-4-(benzylthio)-,  
 hydrochloride  
 RL P-15-7P (Preparation)  
 (preparation of)  
 RN 855621-15-7 CAPLUS  
 CN Butyronitrile, 2-amino-4-(benzylthio)-, hydrochloride (SCI) (CA INDEX  
 NAME)



● HCl

10/518, 210

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=> log h COST IN U. S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	449.78	628.35
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-65.60	-65.60

SESSION WILL BE HELD FOR 120 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 11:13:32 ON 28 JAN 2008